PLYMOUTH AS A TOURIST AND HEALTH RESORT

F. M. WILLIAMS, M.R.C.S., D.P.H., Medical Officer of Health.

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The Medical Officer of Health

takes this opportunity of tendering his sincere thanks

to

W. H. K. Wright, Esq., R. Burnard, Esq., and

H. Victor Prigg, Esq., Borough Meteorologist,

for their assistance in compiling

this Report.

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Plymouth.

HISTORICAL SUMMARY.

By **W. H. K. WRIGHT**, F.R. Hist. Soc., F.L.A., etc.,
Borough Librarian, Plymouth.

Old Writers' Opinions.

TO condense the history of an old town such as Plymouth is not an easy task, owing to the great extent of its operations, and to the importance of the place in all ages. One might fill up many pages with the eulogiums which have been passed upon it by old writers, but one or two of these must suffice. Camden, writing towards the close of the sixteenth century, says:—"The town is not very large, but its name and reputation is very great among all nations, and that not so much for the convenience of the harbour as for the excellence of the natives." John Prince, author of the "Worthies of Devon," speaking of Plymouth, says it is "a port so famous that it hath a kind of invitation, from the commodiousness thereof, to maritime noble actions"; and it is chiefly in this respect that it excels, for from the earliest times the town and Port of Plymouth has been the centre of England's naval and commercial life.

A much later writer, Elihu Burritt, an American, in his entertaining "Walk from London to Land's End," indulges in the following burst of enthusiasm when describing this famous old town:—"Plymouth, old Plymouth! mother of full forty Plymouths up and down the wide world, that wear her memory in their names, write it in baptismal records of their children, and before the date of every outward letter. This is the mother Plymouth sitting by the sea."

Elihu Burritt.

It is of this old and notable town that we have now to treat; our description can in no way enhance its importance or its charms, but we trust that, at least, it will be the means of making it known to some who may hitherto have been strangers to its many attractions.

We shall pass over its early history, in fact there is little of a definite character to say respecting its position in Roman or Saxon times. There was undoubtedly a Roman station here or in the neighbourhood, and there is still more certainty that there was a town or settlement here long anterior to the incorporation of Plymouth in the reign of Henry VI. A few dates and figures may be helpful to our readers in fixing the early history of this famous town. In 1253 a market was first established here, and in 1292 the town was first represented in Parliament. In the days of Richard II. its population was seven thousand, and in 1377 it was one of the four largest towns in England,—London, York, and Bristol alone surpassing it. In 1412 the inhabitants claimed the right of self-government, and protested against paying tribute to the ecclesiastical authorities at Plympton. It was not, however, until 1439 that a charter was granted, and the town was re-christened Plymouth. It had previously been known as Sutton-Prior and Sutton-Valletort, or Vautort, the former being under the control of the Priors of Plympton, the latter being held by the family of the Valletorts. Stirring times were seen in Plymouth in the thirteenth, fourteenth and fifteenth centuries. For from this port sailed many an expedition against our hereditary enemies,

Early History.

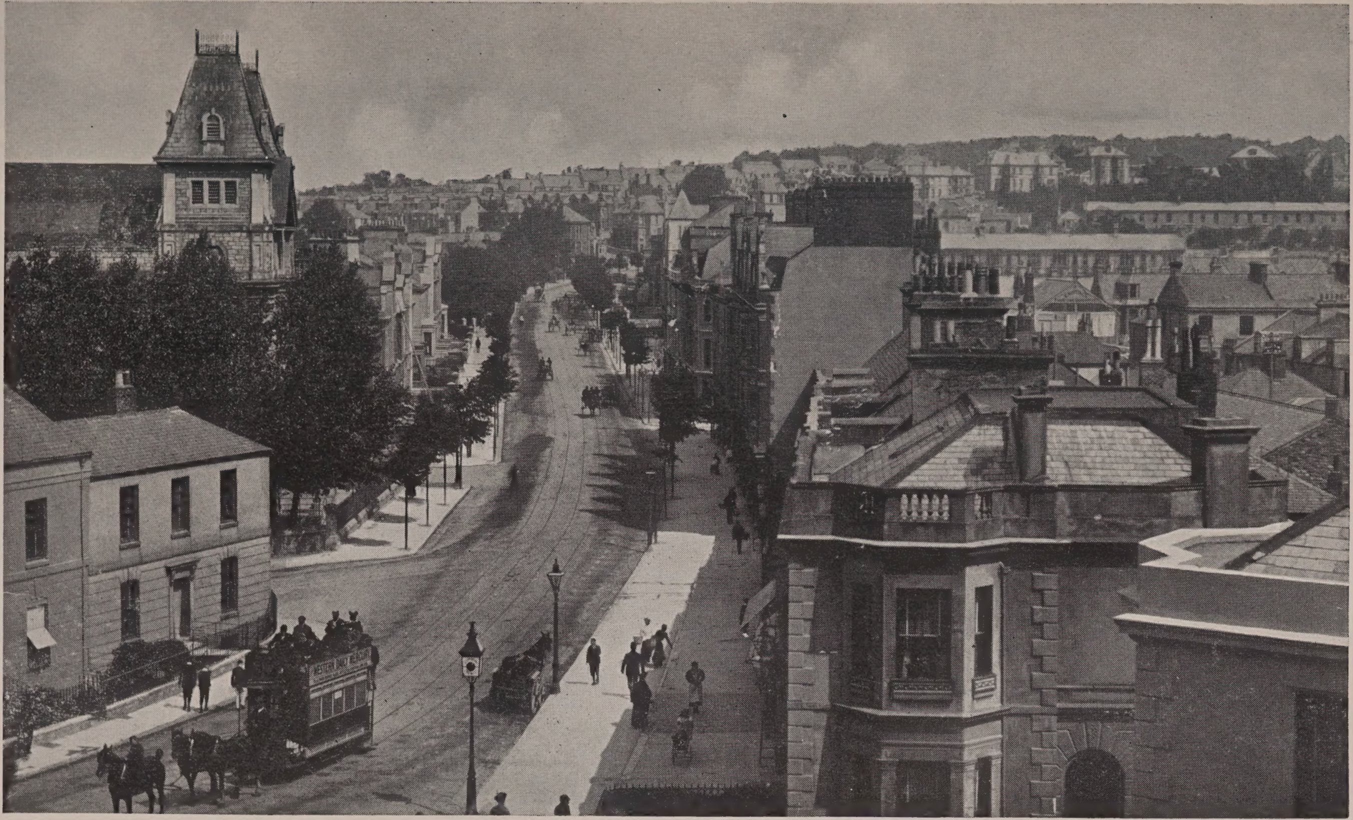
the natives of Brittany, and from hence sailed the Black Prince to wage his wars against the French, returning here with his prisoners and spoils of war. To this port came the fair Katharine of Arragon on her first visit to England, and here she was well entertained by the wealthy merchant, Richard Paynter, whose mansion stood on the site of the Palace Court Board School.

In Tudor Times.

Plymouth in Tudor times was a place of great importance, for it was the very heart of England's fighting power. Here, in the stirring days of good Queen Bess, did Drake and Hawkins, Raleigh and Frobisher, Seymour and Howard, and a host more of our old-time worthies, betake themselves and their ships in preparation for many a notable expedition, the chief object of which was the extension of England's greatness beyond the seas. From this port sailed Drake on his memorable voyage round the World; and here he returned amidst the great rejoicings of the people. From Plymouth went Raleigh on his various ill-fated expeditions, and to this place he came previous to his arrest and imprisonment. In fact, there is scarcely a page of English History of that period that is not associated with the name of Plymouth and Plymouth men. It was to Plymouth men, too, Trelawny and others, that the first charter was granted for trading with America, and this developed into the State of Maine. See "Trelawny Papers." To tell of the doings of Drake and his companions in their struggles all over the world against the dominating power of Spain, up to the culminating defeat of the "Invincible Armada," would be to repeat what is known to every schoolboy; we need only therefore say, that Plymouth was the theatre of the chief of these events, and that Devonshire men were to the front in all these expeditions. Even now, in spite of town improvements, one may walk up and down, and in and out of the old streets of Plymouth, and tread in the footsteps of the Elizabethan worthies who erstwhile swaggered along in all their pride and power. One is almost tempted to enlarge upon the story of these stirring times, "the spacious days of Queen Elizabeth," as they have been termed, for to those days, and to the doings of those men who upheld the position of England on the seas, we certainly owe the foundation of our naval prestige. Charles Kingsley has truly said, "It is to the sea-life and labour of the men of Devon that England owes the foundation of her naval and commercial glory. It was the Drakes and Hawkins', Gilberts and Raleighs, Grenviles and Oxenhams, and a host more of forgotten worthies, to whom she owes her commerce, her colonies, her very existence. For had they not first crippled, by their West Indian raids, the ill-gotten resources of the Spaniard, and then crushed his last huge effort in Britain's Salamis, the glorious fight of 1588, what had we been by now, but a Popish appanage of a world-tyranny as cruel as heathen Rome itself, and far more devilish." This brief extract from "Westward Ho!" will recall to our readers the brilliant story of this notable Devonian, one of the most popular books of the century. But other men and other times demand our attention, so we must pass on.

The Civil War.

The history of the Civil War, in which Plymouth played such a prominent part, is well known to the ordinary reader, but it is not so generally known that Plymouth withstood the attacks of the Royalist forces during the whole period of that time of strife. Again and again did the adherents of Charles attack the town from the heights overlooking the port (Staddon Heights), and from other points of vantage inland, but again and again they were repulsed by the brave burghers of Plymouth, assisted by such troops as could be placed at their disposal by the Parliamentary Generals. After several years of desultory fighting and several smart skirmishes, during the whole of which time Plymouth was in a state of siege, the Royalist troops were withdrawn, the last stand having taken place on a Sunday, in the fields to the north of the town. This "Sabbath Day Fight," as it has been called, is well portrayed in one of the historical windows in the Plymouth Guildhall.



Photograph by] MUTLEY PLAIN, PLYMOUTH,—(NORTH ENTRANCE TO THE TOWN). [Heath, Plymouth.

The Citadel.

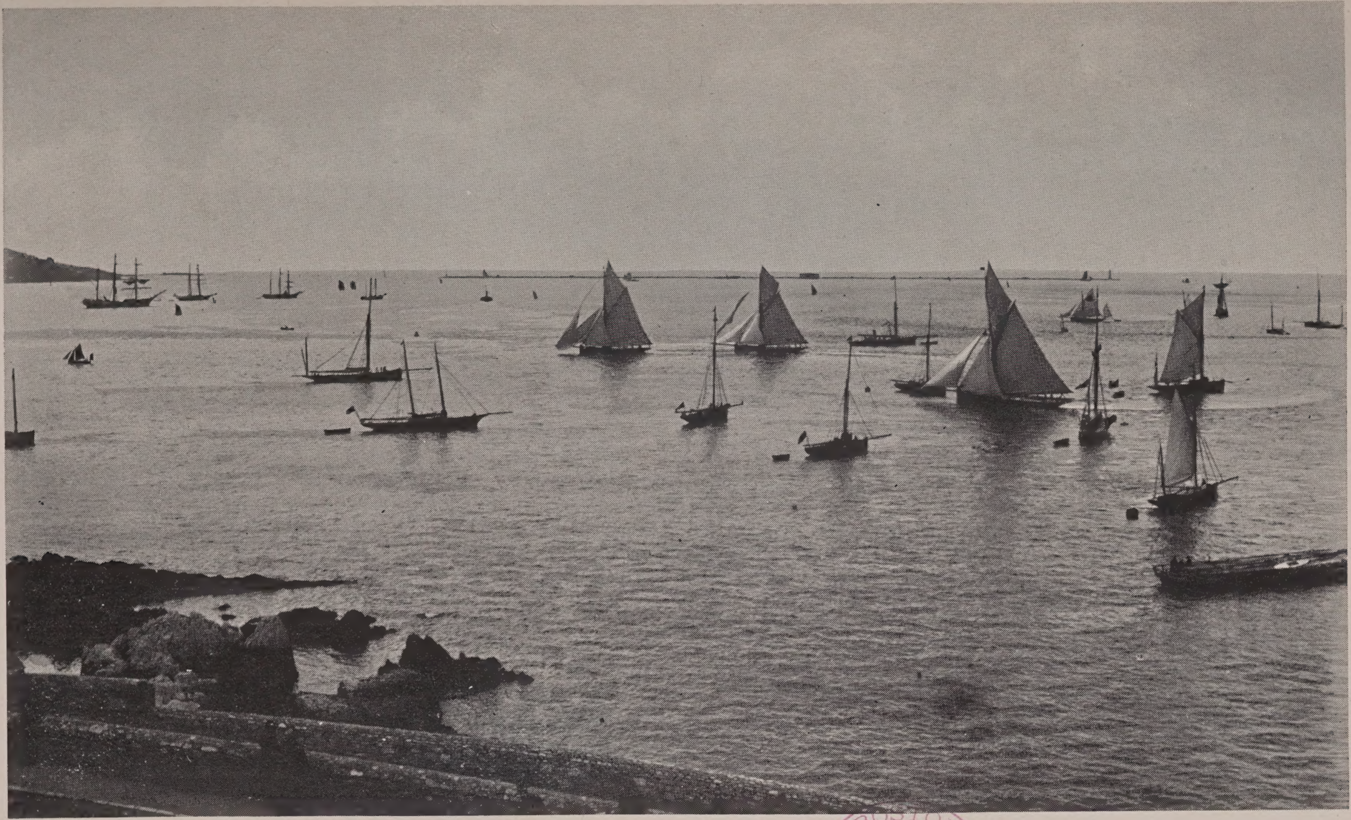
The Citadel, that imposing but obsolete fortification which now frowns down upon vessels entering the port and harbour of Plymouth, was erected between the years 1666 and 1670, ostensibly for the defence of the town, but more probably to overawe the rebellious populace who had so stubbornly resisted all the efforts of the Royalist Generals to get a footing in the town.

The Mayflower.

Another event of historical importance, although its local connection is of the most slender kind, was the sailing of the *Mayflower* with the "Pilgrim Fathers" in 1620. As to this incident, it need only be said in this place that John Bradford and those associated with him, who were bound for New England, made Plymouth their final port of call, and being detained here by adverse winds, they were entertained by Plymouth folk, and on landing in the New World, they called their first settlement New Plymouth, in token both of their desire to perpetuate memories of the old country, and their appreciation of the hospitality which had been extended to them during their brief sojourn in the West.

Plymouth was one of the first towns to proclaim William III. when he landed in Torbay (in 1688) ere starting on his triumphal march to London. This incident, with many others of great interest and importance, is well depicted in the Guildhall windows, to which allusion has already been made. A little later (1768, 1772, 1776) Captain Cook sailed from this port on his various expeditions, and many other enterprises have had their origin in this historic place.

It was from this port also that the first colonists of Australia (we refer to emigrants, not the convicts of Botany Bay) took ship for their home beyond seas. Here also embarked, in the fifties, the brave troops who fought and fell in the Crimean War, and from hence, a year or two after, went the troops sent out to quell the Indian Mutiny. Such are a few of the principal events which have taken place in past generations in connection with this ancient town.



Photograph by] THE SOUND, PLYMOUTH. [*Heath, Plymouth.*

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Plymouth in war time would make the subject of a very interesting article, for it and its sister-town, Plymouth Dock—now Devonport—witnessed many stirring scenes.

Plymouth in the Drama.

There is an amusing travesty of these times in a play performed at Covent Garden Theatre, in 1779, entitled "Plymouth in an Uproar." It is a musical farce, the music having been composed by Dibdin, the eminent song writer. Plymouth was at the time suffering from the war-fever. The French were hourly expected. Rumours were brought into the town of the approach of the invaders, and the inhabitants were kept in a continual state of alarm and dread. The streets were dangerous, being filled with noisy sailors and soldiers, intent on mischief; and the press-gang was busy feeding His Majesty's Navy with unwilling sailors. Amidst such scenes as these this little comedy opens, and one of the most striking situations is that in which the well-to-do towns-people (scared by the reported landing of the French troops at Maker) are represented as bargaining with the landlord of the principal inn for conveyances to remove them and their belongings to the safe retreat of Dartmoor.

This was not the first time that the good old town of Plymouth had figured in the drama, for we recall the title of another play entitled "Newes from Plymouth," in which the writer, Sir William Davenant, poet laureate in the reign of Charles II., has some smart things to say of the old town in his days.

Growth, Population, &c.

But war-times in all ages appear to have been the making of Plymouth, and in the latter part of the last century and the beginning of the present century, war preparations, the fitting out of ships, and the general increase in the national armaments, did unquestionably assist Plymouth's growth, and tended to create the populous suburbs of Dock, Stoke Town, Morice Town and Torpoint, the greater portion of which is now incorporated in the County-Borough of Devonport. In 1801, the total population of Plymouth

Photograph by] THE BURRATOR FALLS [*Heath, Plymouth.*

(NEAR THE NEW BURRATOR RESERVOIR,—PLYMOUTH WATER SUPPLY).

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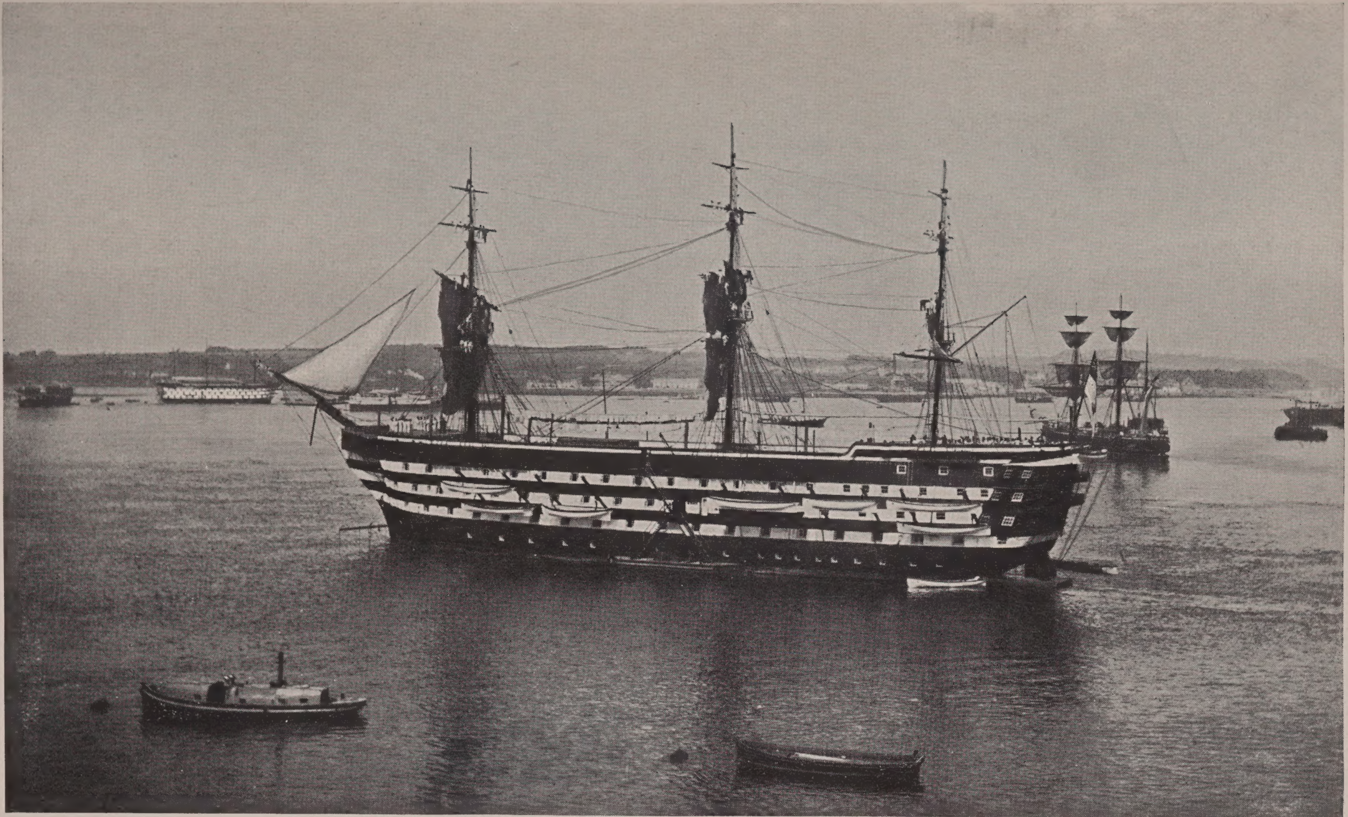
was 19,040, while that of Plymouth Dock was 23,747. These figures go to prove that the bulk of the population was concentrated in the neighbourhood of the Dockyard and Arsenal. The relative figures in 1898 are:—Plymouth, 99,136; Devonport, 54,803; Stonehouse, about 20,000.

Early in the present century the town of Plymouth was small and circumscribed in area, now it is spreading abroad in all directions. George Street, the now fashionable business centre, was then suburban, Union Street was non-existent, the district being little more than an unreclaimed waste affected by the tides from Millbay. The only approach to Devonport was by way of Millbridge, Stoke. The town clustered chiefly by the waterside, and until Frankfort Place was built there were few houses west of St. Andrew's Church.

Fifty years ago Plymouth was in a very bad state from a sanitary point of view; but attention having been drawn to its defects by Dr. Rawlinson, who prepared a lengthy report on the subject, reforms were speedily instituted, which have borne good fruit in later times. But this is a subject that will be treated at greater length in another part of this treatise; we, therefore, pass it by with this brief comment.

Old Maps.

It is interesting to glance at some of the old maps of Plymouth to note the changes that have taken place from time to time. Many such exist, one of the earliest dating from the reign of Henry VIII. Another map is called the Siege Map, as it shows the wall and fortifications at that interesting period. Another chart was prepared in 1696 by Captain Grenville Collins, but very little of the town is shewn, the map being intended chiefly for the use of mariners. A map executed by Benjamin Donn, and published in 1765, gives a plan of the town and Citadel of Plymouth, and a plan of Stoke Town and Plymouth Dock. This is interesting, as it has the names of some of the principal streets, and gives a fairly accurate idea of Plymouth in the middle of the eighteenth century. The most elaborate and complete map of Plymouth is



Photograph by] H.M.S. "IMPREGNABLE." [Heath, Plymouth.

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that published by Rich. Cowl, in 1778. In this, by means of a key, we are enabled to trace the principal streets and buildings of note.

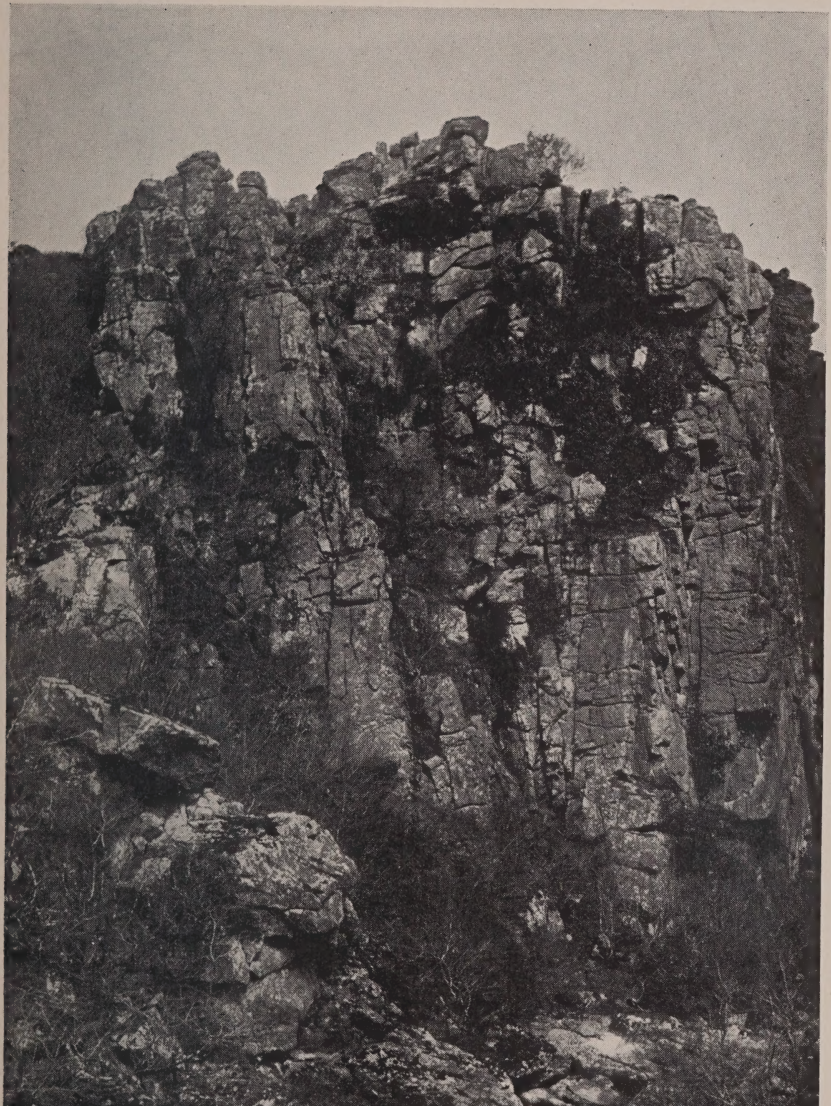
It may be interesting to visitors to Plymouth to know that the fine pile of buildings at the bottom of George Street, consisting of the Royal Hotel and Theatre and the Athenæum just beyond, was commenced in the year 1811; the Public or Proprietary Library in Cornwall Street was opened in 1812. In the same year a road between Plymouth and Stonehouse across the marshes was opened for traffic.

The Plymouth Breakwater was commenced in 1812, and completed about 1842.

Visits of Royal Personages.

In the year 1815, Napoleon Bonaparte, having surrendered himself with his retinue to the English Fleet off Rochester, was received on board the *Bellerophon*, Captain Maitland, and arrived in Plymouth Sound July 20th. During the time the ship remained in the port thousands of persons went daily in boats to see the fallen Emperor. Plymouth has, from time to time, been favoured with the visits of many Royal and distinguished personages, but not under the same conditions as those which governed the visit of Napoleon I. Thus, in 1817, the Duke of Gloucester visited Plymouth; in the same year the Grand Duke Michael paid the town a visit; in 1827, the Duke of Clarence opened the Laira Bridge which had been built by the Earl of Morley. Don Miguel, of Portugal, was here in 1828, and later some three thousand Portuguese refugees arrived at Plymouth to avoid the tyranny of Don Miguel. The Queen's first visit to Plymouth was with Prince Albert in August, 1843. She visited the port on several subsequent occasions, and says in her Diary that "Plymouth is beautiful."

A notable event in the record of progress in this district was the opening of the South Devon Railway from Exeter to Plymouth, which took place in the year 1849; and in 1857, the Royal Albert Bridge, which spans the Tamar at Saltash, was



Photograph by] THE DEWERSTONE, NEAR PLYMOUTH. [*Heath, Plymouth.*

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opened by the Prince Consort. General Garibaldi arrived at Plymouth, en route for Penquite, Cornwall, in April, 1864; and in 1865, on the occasion of the meeting of the Royal Agricultural Society of England, Plymouth was honoured with a visit from their Royal Highnesses the Prince and Princess of Wales. In 1871, the ex-Emperor Napoleon III., with the Prince Imperial and Suite, paid a brief visit to Plymouth. Since that time Royal visits, and visits of other noteworthy personages, have been so common that they need scarcely be recorded. In like manner, Plymouth has, on sundry occasions, received the large peripatetic societies and given them a hearty welcome. The British Association, the Social Science Congress, the Church Congress, the Associated Chambers of Commerce, the Library Association of the United Kingdom, the Baptists' Conference, the Wesleyan Conference, and a host more too numerous to mention, have sojourned amongst us, and their members have carried away pleasant recollections of this "Mother Plymouth sitting by the sea." A few years ago the Mayor of Plymouth received the representatives of the Pilgrim Fathers who made a special pilgrimage to this country to trace the connection of their ancestors; and last year (1897) Plymouth was favoured with the visit of some sixty or seventy American Librarians, who were charmed with all they saw. Thus, the old town has been kept well to the fore, and thus year by year its charms are being made more widely known by an ever widening circle of visitors.

Visits of Peripatetic Societies.

Plymouth has been the birthplace of many men of note in all branches of learning,—in arms, in art, in song. Sir John Hawkins and Sir Richard Hawkins were both Plymouth men, who distinguished themselves in the days of Elizabeth; Sir Thomas Edmonds, who was Ambassador for James I. to Brussels and to France, was born at Plymouth in 1562; John Quick, one of the ejected ministers, was born at Plymouth in 1636. Joseph Glanvil, a celebrated divine and philosopher, was also born at

Men of Note born at Plymouth.

Plymouth in 1636. He was a most voluminous writer; George Hughes, the well-known Vicar of St. Andrew's, was also a writer of many religious works. Abraham Cheare, Pastor of the Baptist Church at Plymouth, and Abednego Sellar, non-juror, were also Plymouth men.

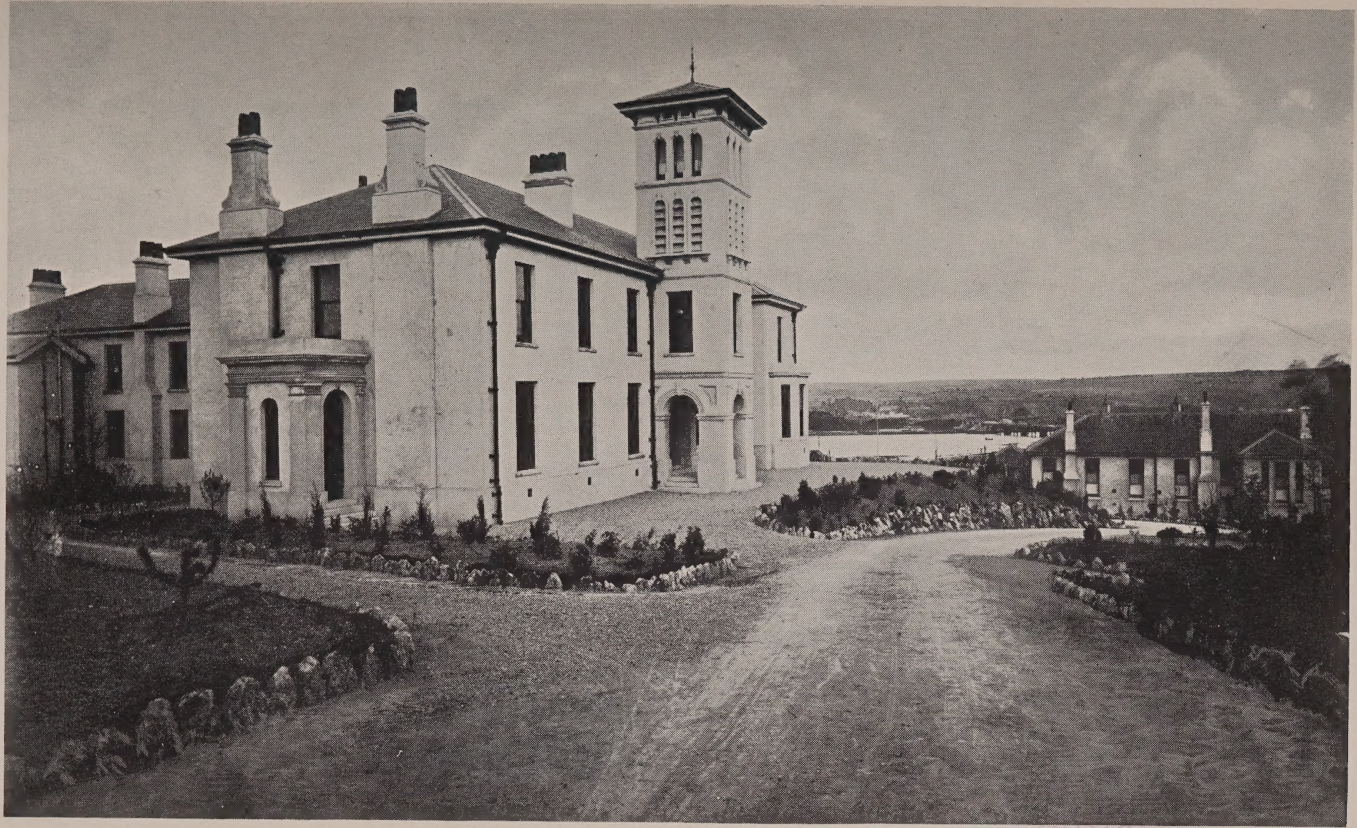
Jacob Bryant, the noted mythologist, was born at Plymouth, but left the town when a child. Dr. Zachary Mudge, Vicar of St. Andrew's (1731—1769) was born at Plymouth in 1694. He was the friend of Reynolds, Burke, Northcote, Johnson and other famous men of his time. Another famous Plymouth divine (though born at Exeter) was Dr. Hawker, for many years Vicar of Charles' Church. Henry Moore, the last Presbyterian (Unitarian) minister of Liskeard, was born at Plymouth in 1732. Nathaniel Howard, schoolmaster at Tamerton, a native of Plymouth, was remarkable for his acquaintance with languages. The Dartmoor poet, N. T. Carrington, was a native of Devonport; Samuel Rowe, author of the "Panorama of Plymouth" and the "Perambulation of Dartmoor," was a Plymouth bookseller. Dr. John Kitto, the celebrated Biblical writer and Eastern traveller, was a Plymouth workhouse boy. Mr. R. N. Worth, the historian of Plymouth, and a man of many parts, was a native of Devonport. The first Lord Monkswell (better known, perhaps, as Sir R. P. Collier) was a native of Plymouth, where his family have been engaged in commercial pursuits for more than a century. He represented Plymouth in Parliament for many years, serving as Solicitor-General and Attorney-General, was then made a judge, and was raised to the peerage in 1885.

Amongst prominent scientific men must be mentioned Dr. James Yonge, F.R.S., who died in 1721, and was the writer of several philosophical treatises; Dr. Huxham, another Plymouth practitioner, is well-known for his work on fevers; and Dr. John Mudge, son of Zachary Mudge, was also a specialist in medicine; William Elford Leach, some time curator of the British Museum, was born at Plymouth in 1790; Sir William Snow Harris, a very distinguished electrician, was born in Plymouth in 1791; Dr. Jonathan Hearder, also an electrician of repute, was born in Plymouth in 1809. Amongst other distinguished men of Science who have flourished in Plymouth may be mentioned Charles Spence Bate, F.R.S., John Prideaux, Colonel Hamilton Smith, T. R. A. Briggs, I. W. N. Keys, Rev. Richard Hennah, Dr. Woollcombe, Dr. Edward Moore, Mr. J. C. Bellamy, and a host of others.

Plymouth has won great repute in the world of art. Three Royal Academicians and one President of the Royal Academy claimed Plymouth as their birthplace. Sir Joshua Reynolds, though born at Plympton, about four miles from Plymouth, first practised his art in this town. Sir Charles Lock Eastlake, P.R.A., Samuel Prout, James Northcote, Benjamin Robert Haydon, Solomon Hart, A. B. Johns, P. H. Rogers, Samuel Cook, T. H. Williams, Nicholas Condy, Ball, Philip Mitchell, and many others were connected with Plymouth either by birth or long residence. Plymouth of to-day has also a long and distinguished roll of living artists. In other branches of art, to wit, Music and the Drama, Plymouth has not been behind-hand, and the theatre has always been well supported. At the present time, in addition to the Theatre Royal, there is the Grand Theatre at Stonehouse, the Metropole at Devonport, the Palace Theatre of Varieties in course of erection in Union Street, the St. James's Hall and other places of popular amusement. Grand concerts and oratorios are frequent, and are generally well supported, while band performances on the Promenade Pier, on the Hoe and in the various parks and pleasure grounds are of almost daily occurrence.

Churches, etc.

This notice would be incomplete without a brief reference to the Old Church, dedicated to St Andrew, centrally situated in the busiest part of the town. Its massive tower was erected in 1460, but some portions of the present structure date from a much earlier period. Adjoining the church is a fine old building known as the "Abbey,"



Photograph by] ADMINISTRATION BLOCK, ISOLATION HOSPITAL, PLYMOUTH. [*Heath, Plymouth.*

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formerly the official residence of the priests connected with St. Andrew's. The church is full of interest, and contains many fine and notable monuments. There is a fine bust, by Chantrey, of Dr. Zachariah Mudge, a former Vicar, a very elaborate monument to Sir John Skelton, Governor of the Citadel under Charles II., and a slab in the centre aisle is inscribed with the name of Charles Matthews, the eminent comedian, who died in Lockyer Street, and was buried here. The church has a fine peal of ten bells, a carillon or Westminster chimes, and a clock with four dials. The present Vicar is Archdeacon of Totnes, and the service is of a modified cathedral type. The choir is one of the largest in England, and very efficient.

Charles Church was erected in the middle of the seventeenth century, the building operations having been interfered with by the Civil War and Siege. It was dedicated in 1666.

Plymouth has many other churches and places of public worship, but only those already mentioned have any claim to antiquity or historic interest. Amongst the many sects which have flourished here, the Plymouth Brethren is the most notable, but this denomination is numerically very small, although it originated in this town. Schools of all kinds are abundant, the Public School in Cobourg Street being the largest, and there are several charity schools, some of them having been founded in the days of Elizabeth. But as the province of this historical summary is to cite history rather than to describe buildings, it only remains to say that the noble Guildhall which occupies such a commanding position in the centre of the town was opened in 1874.

The Old Guildhall, now the Free Library, was erected in 1800, on a site previously occupied for several centuries by buildings devoted to the business of the town. The old town is rapidly disappearing, the low buildings and narrow streets being rapidly replaced by wide streets and buildings of a palatial character. Thus the old merges into the new, and thus the Plymouth of 1898 is to all intents and purposes a new town as compared with the Plymouth of 1800.

PLYMOUTH.

THE site of the town is upon what may be described as a series of natural terraces sloping south to the sea, and forming part of the foot hills of Dartmoor, situated in the extreme south-west corner of Devonshire, in lat. 50·22 north and long. 4·10 west, the portion of the harbour known as the Hamoaze forming the natural boundary of the counties of Devon and Cornwall. The highest part of the town has an elevation of 200 feet, whilst the lowest is only slightly above sea level. The area of the Borough is 2,417 acres, with a population of 99,136.

The Harbour.

The harbour, which is one of the finest and most extensive in the kingdom, opens to the south. Upon the west side it is protected by the heights of Mount Edgcumbe, Maker and Penlee, on the east by the high land of Bovisand, while the Breakwater protects from south and south-west gales. The entrances are free from danger, and easy of access for vessels at all states of tide, and in all weather. The inner harbour, used practically exclusively by vessels of the Royal Navy, is formed by the estuaries of the rivers Tamar and Tavy, and is land-locked, having ample depth of water for the largest battleships. Extensive works of dock construction, etc., are at present being carried on by the Government, and, when completed, the port will be the largest naval depôt in the world.

The harbour is also used as a port of call for the ocean mail steamers of the P. & O. Co., Orient Co., New Zealand Shipping Co., Queensland Royal Mail Co., Royal Mail Co., British India Co., Ducal Line Co. and the North German Lloyd Co. In connection with all these steamers there is a special express service of trains to London.

Military Station.

Plymouth is also an important military station, several regiments being always stationed here; the forts are manned by the Royal Artillery. There is also a depôt for Submarine Mining Engineers, who occupy the Elphinstone Barracks, situated on the shore of Cattewater. Adjoining the barracks are large stores, workshops and appliances requisite for submarine mining.

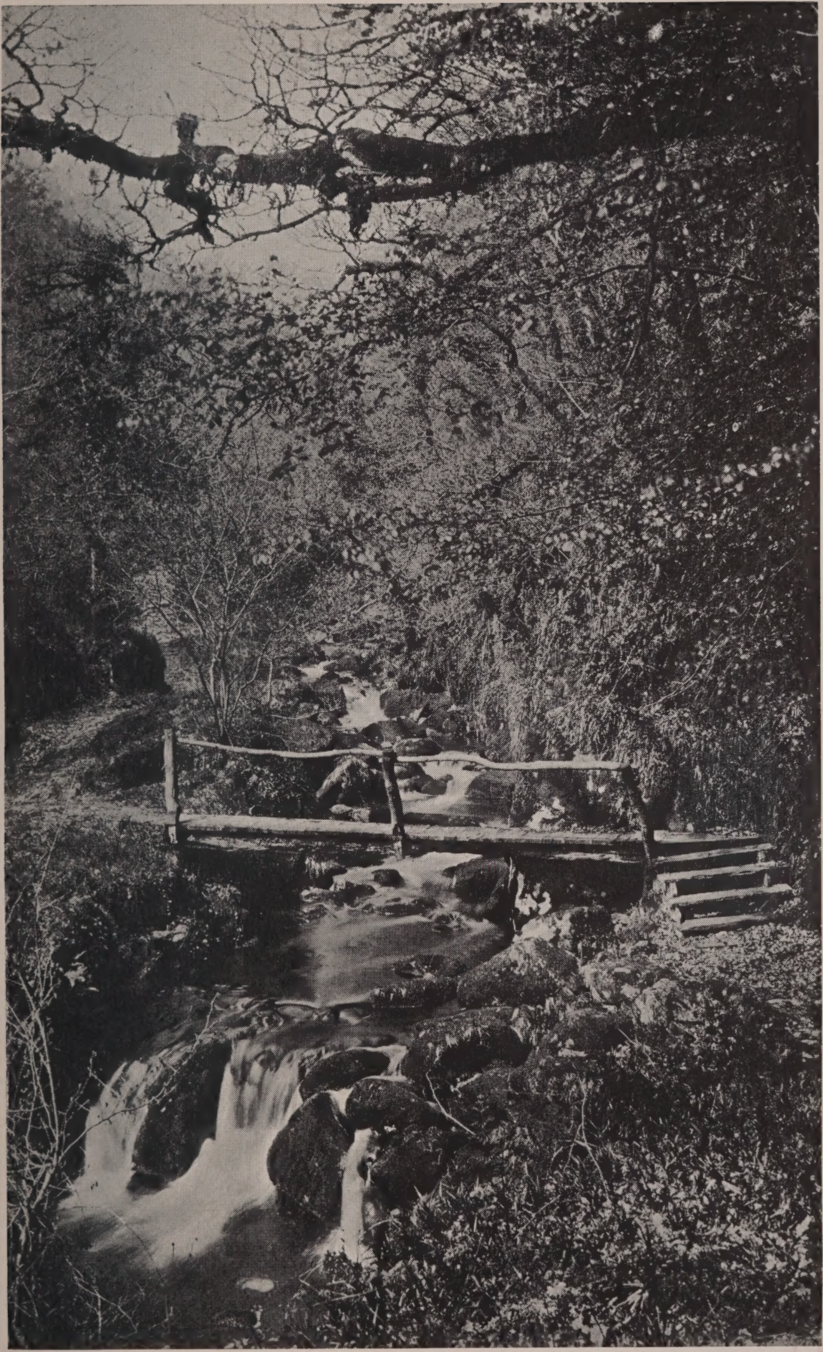
In the older part of the town the streets are narrow, but during the past seven or eight years the Corporation have vastly improved, and are still improving, many of these districts. Streets have been widened, many houses have been demolished owing to their conditions; the streets have been repaved and better lighted. In the newer portion of the Borough the streets are well laid out, well let and well kept.

Lighting.

The Corporation is now engaged in constructing an Electric Lighting Station for the purposes of public and private lighting and traction for their tramway system. The work will most probably be completed within twelve months.

Fishing Fleet.

The fishing industry of the port is of very considerable importance, and produces some £88,000 per annum. There are about 200 fishing boats owned in the port. These are, during the spring, augmented by about 200 strangers—principally east-country boats—engaged in the mackerel fishery, and there are a few Scotch,



Photograph by] River Scene near Plymouth,—the Awns and Dendles. [*Heath, Plymouth.*

French and Dutch boats that use the port occasionally. One of the prettiest sights to be seen in the harbour is, I think, the fishing fleet putting to sea on a bright, breezy spring morning,—perhaps as many as 300 sail. A sight to be seen, especially by the visitors from inland towns, is the landing and selling the fish at the fish market, from whence they are despatched to London, Paris, and the large inland towns.

Tramways, Omnibuses and Railways.

The means of communication between the different parts of the town are ample and cheap. There are two systems of tramways, the larger being owned by the Corporation. There is also a good omnibus service between different points. On two or three days in the week during summer well-appointed four-horse brakes run to all the principal points of interest in the neighbourhood. The routes lie, without exception, through beautiful scenery

In addition to the excursion steamers, steam launches ply between different parts of the harbour, so that the tourist has ample opportunity of seeing all that is of interest.

Yachting.

As a yachting port Plymouth possesses many advantages. There is good anchorage, and a berth can generally be found in smooth water For small vessels the estuaries of the rivers discharging into the harbour and the harbour provide good sailing ground ; there are snug harbours within easy sail east or west of the port. There are three yacht clubs, the Royal Western, the Royal South Western and the Royal Corinthian. The two former possess spacious club-houses ; the latter is about to build a club-house in a most picturesque position on the low cliffs beneath the Citadel. During the season handicap matches are sailed on each Wednesday and Saturday. There is an annual regatta, lasting three days, when the crack racers put in an appearance. Given fine weather and a good sailing breeze, the harbour presents from the Hoe upon a regatta day a sight to be remembered.

Plymouth does not possess golf links, the physical con-

Golf.

ditions of the situation of the town naturally are not suitable for golfing, but splendid links are to be found at Whitchurch Down, some ten miles out, easily accessible by train,—Tavistock or Horrabridge stations being about equi-distant from the links. Tavistock has an excellent golf club.

Angling.

The moorland streams and rivers afford excellent trout-fishing,—the Tamar, Plym and Tavy afford good peel and salmon fishing. A river conservancy protects the fishing in these rivers, and grants the necessary licences. The best fishing is within easy distance of the town, the nearest about four miles. The scenery on the Tavy is most romantic, soft and sylvan in its tidal waters and its lower reaches, while in its upper waters—especially in that part on Dartmoor known as Tavy Cleave—the scenery is rugged and grand, especially if the fisherman or tourist happen to see a summer flood roar down the moorland gorge, and hear the musketry-like rattles of huge boulders in the river-bed being drawn against one another by the rush of water; and, perhaps, to enhance the weirdness of the scene, may be heard the low mutterings of distant thunder, or the crash of a nearer storm; the hills echoing the crash in apparently endless echoes. After such a day of storm away in the moorland one fully appreciates the return to a well-appointed hotel, and the cheerfulness of the well-lit streets, or a cosy seat in the stalls of the theatre.

Sea Fishing.

To the angler who prefers sea-fishing the harbour and offing afford splendid sport. Bait, boats, and gear can be hired very reasonably; the boatmen possess a knowledge of the best fishing grounds. In the harbour there is, in the season, good pollack, mackerel, pouting, plaice, bass and mullet fishing. Along the shore, prawning and shrimping. Outside, for those who can stand the tumble of an Atlantic swell, there is excellent sport—large conger, race pollack, bass, dory, hake, sole, plaice, turbot, mackerel and whiting. The latter are, perhaps, the most fascinating to the angler, as the number of fish taken is greater. The whiting ground is about seven miles from the town. The fishing is done while at anchor; the best time is at dawn and early morning. Given a good day, and favourable conditions, a catch of 10 to 16 dozen is of ordinary occurrence. The writer and a friend took 11 dozen fish in three hours on one occasion. During the mackerel season, excellent sport is to be obtained by whiffing or trolling. The lines are towed by the boat, as this method of fishing requires that the bait should be moved smartly through the water near the surface. A mackerel is a most game fish, and shews as much fight as a peel, weight for weight. Mackerel fishing with a fresh breeze and a good five-tonner under one, when the fish are going freely, is, perhaps, the most delightful sea-fishing one can get. The fresh caught fish—stiff, stark and resplendent with all the colours of the rainbow—is a very different fish from the flabby, soft thing one sees on the fishmongers' slab in the large inland towns, and tastes when cooked very differently too.

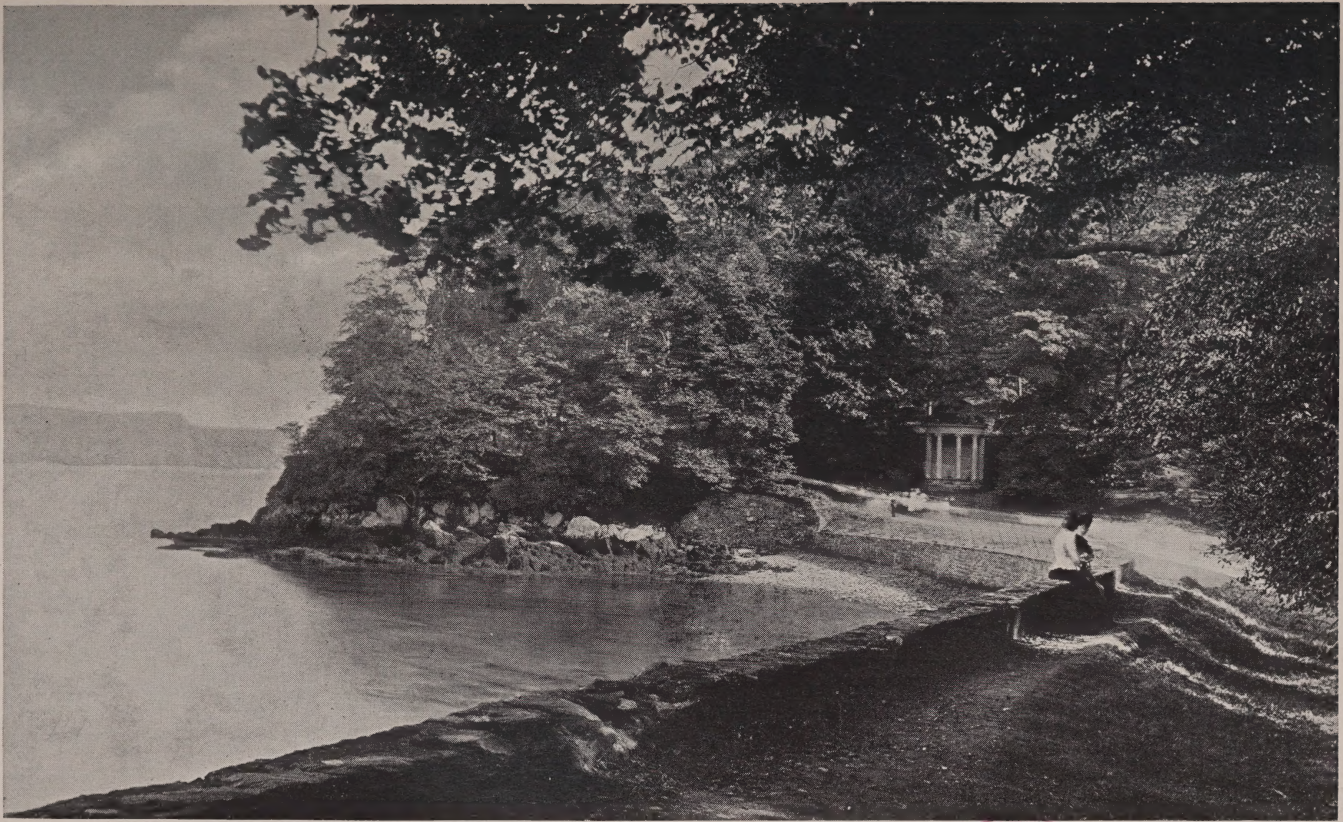
Sea Bathing.

The shores of the harbour being mostly steep and rocky, there are no stretches of sandy beach, so dear to children, and which constitutes to them the chief delight of a seaside holiday, but there are, however, some small pebbly beaches, which afford good playgrounds for the children, and safe places to bathe from. The Corporation at various points have provided good bathing accommodation (dressing houses, diving places, etc.), and, for the ladies, an excellent bathing basin, with dressing houses and all necessary conveniences. The water enters direct from the sea, and at low tide is retained by sluices.

Hotels.

There is excellent hotel accommodation in the town, and there are many good boarding houses. The tariff of the hotels is very reasonable, especially as compared with that of other health resorts.

The town of Plymouth possesses the two chief factors that are required in a winter resort:—First, a mild, equable climate; second, ample amusement is provided for the visitor during



Photograph by] A BATHING BEACH, PLYMOUTH HARBOUR. [*Heath, Plymouth.*

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Theatres, Concerts, etc.

the winter,—two good theatres, numerous concerts, organ recitals, military band concerts, dances, and frequent entertainments at the different public halls. The Corporation are responsible for the weekly concerts in the Guildhall, which are carried out under the direction of the Borough Organist. During the summer months the Corporation provide military band performances in the various open spaces owned by the Corporation. Concerts are also given each day on the Pier.

Hunting.

There are several good packs of foxhounds in the neighbourhood, also beagles and otter hounds.

OBJECTS OF INTEREST.

St. Andrew's Church.

PLYMOUTH possesses many churches, the most interesting, perhaps, being the fine Parish Church of St. Andrew, situated practically in the centre of the town, and adjoining the Municipal Buildings. It has seating accommodation for 2,000 persons. The style of architecture is known as the Devonian Perpendicular. The church was built in the fifteenth century, and restored in 1875 by Sir Gilbert Scott.

Municipal Buildings.

The Municipal Buildings form two sides of a square, of which the other two sides are formed by the Church of St. Andrew and the Post Office. They were erected some twenty-five years since. The block of buildings on the south side of the square consists of Police Court, Law Courts and Guildhall (a very handsome hall, provided with large organ and orchestra). The hall seats 3,000 persons. The block on the north side contains the Council Chamber, the offices of the officials, and committee rooms. The Council Chamber and Guildhall can always be seen by visitors, upon application to the caretaker

The Marine Biological Laboratory is situated upon the Hoe

Marine Biological Laboratory.

between the Citadel and the Sound. A considerable sum was granted by the Treasury for equipment, and also a yearly subsidy for maintenance. I believe this is the only institution of its kind receiving grants from the Government. The principal object of its mission is the study of the habits and conditions of life of our food fishes, and excellent work has been done in this direction since its establishment. A steamer, provided with trawls, nets, etc., forms part of the equipment of the institution. The lower portion of the building is fitted as an aquarium, to view which the public are admitted upon payment of a small fee. The upper portion of the building consists practically of laboratories.

Theatre and Royal Hotel.

The Theatre and Royal Hotel form one large block of buildings practically in the centre of the town. Both Hotel and Theatre are the property of the Corporation. The Theatre is well arranged and decorated, having accommodation for 2,000 people. Originally built in 1813, destroyed by fire 1878, and re-erected.

Athenæum.

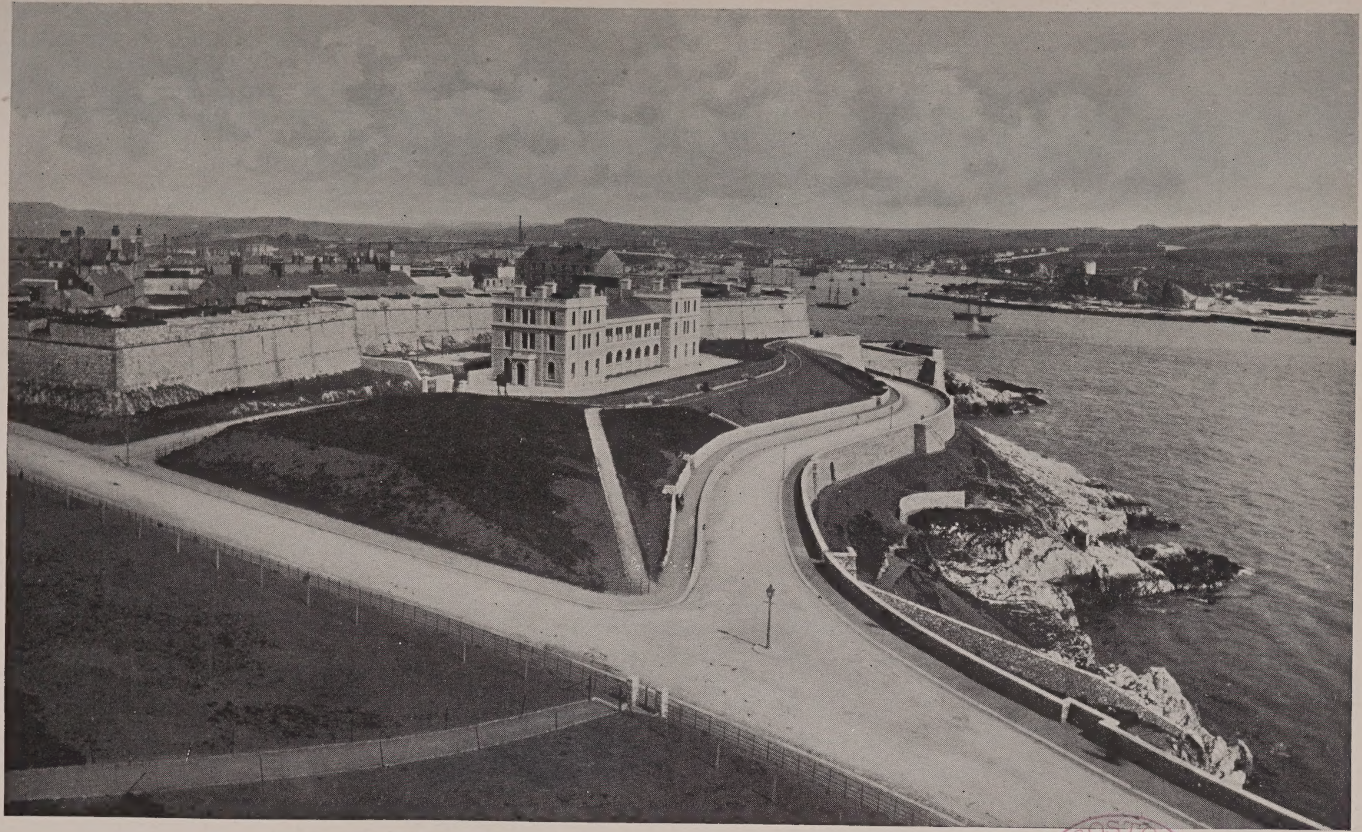
The Athenæum adjoins the theatre; it contains a lecture room, art gallery, library and a well filled museum The Athenæum belongs to the "Plymouth Institution," who hold all their meetings here. During the winter, papers are read one evening in each week upon some scientific, historical, or literary subject.

Technical Schools.

The Technical Schools, erected as a memorial of Her Majesty's Jubilee, are situated in the Tavistock Road. They are excellently equipped, and possess a thoroughly efficient staff of teachers, and are doing good work. A museum and art gallery are to be erected upon a site adjoining the schools.

Libraries.

The Cottonian Library, in Cornwall Street, contains some 20,000 volumes, besides a valuable collection of drawings, prints and paintings, the gift of the late Mr. Cotton.



Photograph by] THE MARINE BIOLOGICAL LABORATORY, THE HOE, PLYMOUTH. [Heath, Plymouth.

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The Free Public Library occupies the Old Guildhall in Whimple Street. It contains some 50,000 volumes, and is admirably administered.

S.D. & E.C. Hospital.

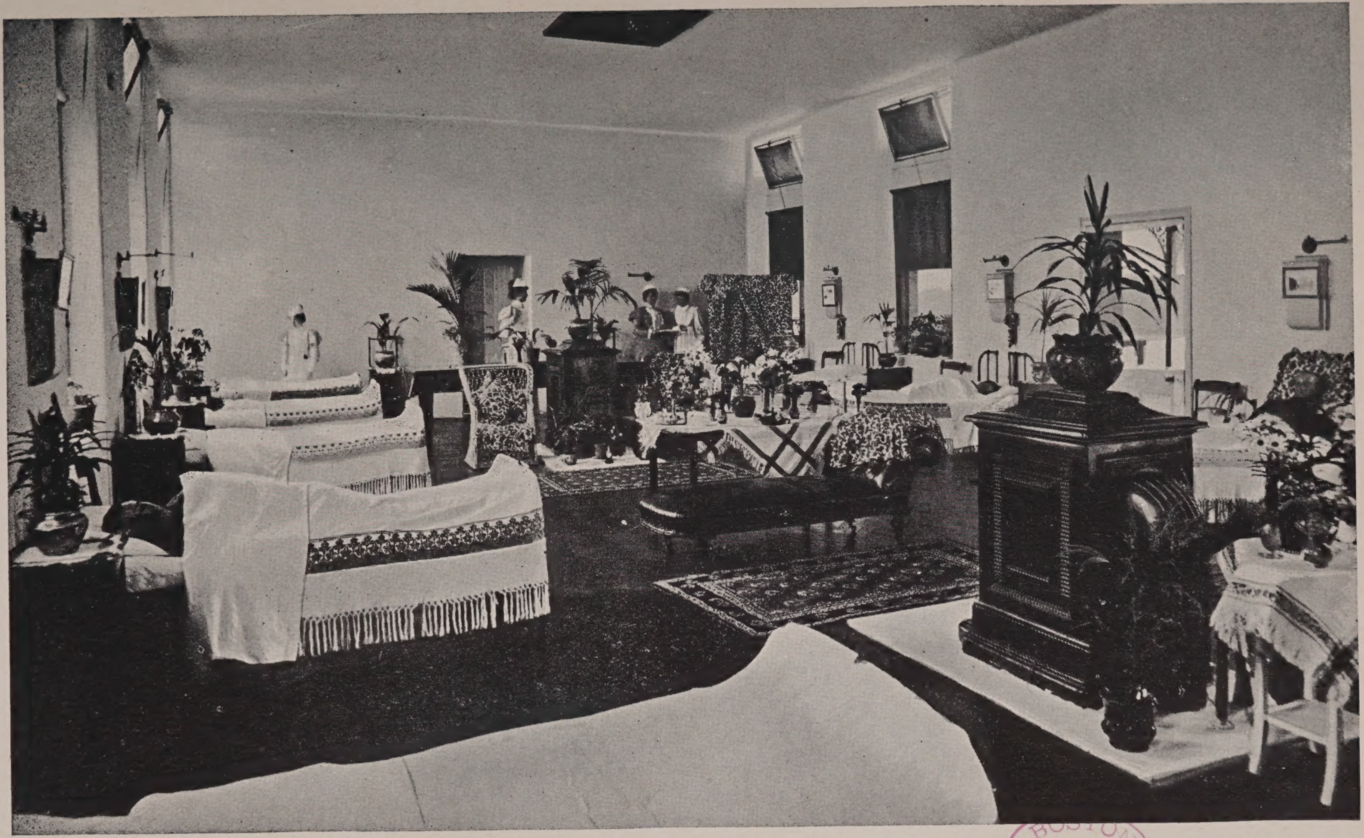
The South Devon and East Cornwall Hospital is situated upon an excellent site on the high ground near Freedom Park, having accommodation for 130 patients. A new wing has just been completed, giving accommodation for another thirty beds. The Hospital is supported by voluntary contributions and bequests, and is managed by a representative committee.

Isolation Hospital.

The Borough Isolation Hospital, the property of the Corporation, is situated about half-a-mile to the east of the South Devon and East Cornwall Hospital, and has accommodation for sixty patients. Paying patients are taken, for whom there are private wards. Nurses are also supplied for nursing infectious sickness.

The Breakwater.

The Breakwater, which protects the harbour from south and south-west gales, and converts an open bay into a sheltered harbour, leaving a passage on the west side of half-a-mile, on the east side one mile, is an excellent sample of engineering skill. It is 1,700 yards in length, curving towards the north, the width at the base being about 300 feet, narrowing to 40 feet at the top, which is about two feet above high water level. The cost of construction was £2,000,000, while it is calculated some 7,000,000 tons of stone were used in its construction. On the extreme west end is a lighthouse, on the extreme east end a beacon. Daily excursions are made during the summer to the Breakwater, which upon a breezy summer day makes a delightful promenade. A number of men are permanently employed in repairing damage by storm. They live on board a hulk moored close inside the Breakwater. The circular iron fort situated on the shore side of about the centre of the Breakwater, is a prominent object in the harbour. It is practically shot proof, and is armed with heavy guns. The water supply for the



Photograph by] INTERIOR OF A WARD, ISOLATION HOSPITAL, PLYMOUTH. [*Heath, Plymouth.*

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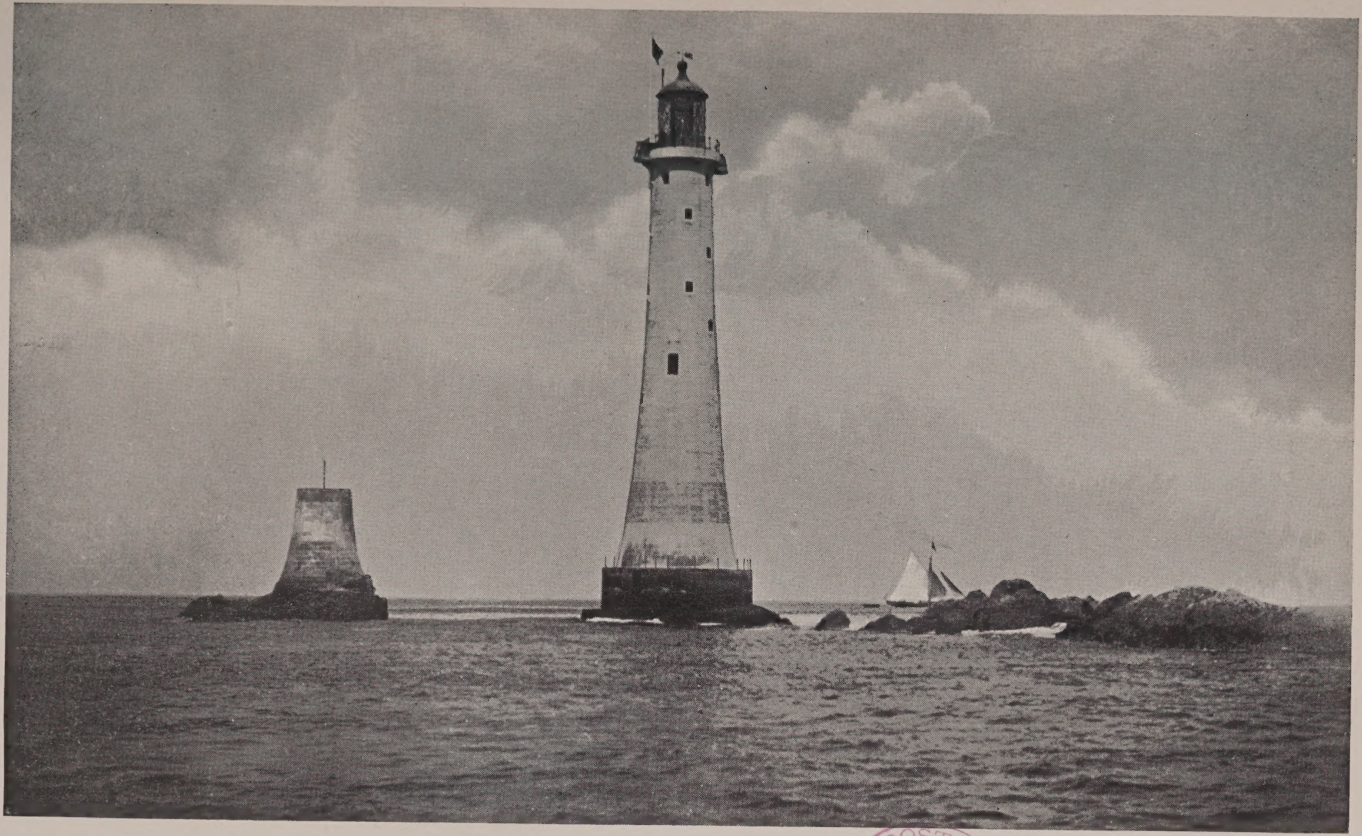
garrison is obtained from a boring into the bed of the sea, and is ample and pure.

The Eddystone Lighthouse.

The Eddystone Lighthouse is familiar by name to every one, and is built on a portion of a dangerous reef of rocks lying directly in the track of vessels passing up or down Channel, or making for Plymouth from the south. The distance from the town is some thirteen-and-a-half miles, and nine miles from the nearest land. The existing tower was erected to replace the Smeaton Tower, and is the fourth that has been erected on this celebrated reef. The first was built by Winstanley, 1696; the second by Rudyard, 1707; the third by Smeaton, 1776; the present tower was designed and built by Sir James Douglas. It was commenced in 1879 and completed in 1882. The tower is 160 feet in height from the rock to the top of the lantern. The reason for the erection of the present structure was that the portion of the reef upon which the Smeaton Tower stood was being undermined by the ceaseless fret of the Atlantic seas. Upon the completion of the present lighthouse, the old one was, with the exception of about thirty feet of the base, taken ashore and re-erected upon the Hoe on the site of the old landmark, and is now the property of the Corporation. The cost of rebuilding was defrayed by the munificence of a well known townsman of Plymouth. During the summer, frequent excursions are made to the Eddystone by the local steamers, and occasionally, when the weather permits, excursionists are landed on the rock, There are three light-keepers in charge, who are relieved every six weeks, weather permitting. The light is a dioptric double-flashing of the second order, visible in clear weather seventeen-and-a-half miles. Formerly a bell was tolled during foggy weather, but this has been superseded by the use of an explosive fog signal, fired at intervals of five minutes, and which can be heard thirteen or fourteen miles distant.

The Hoe, as well known as Plymouth itself, from its



Photograph by] THE EDDYSTONE LIGHTHOUSE. [*Heath, Plymouth.*

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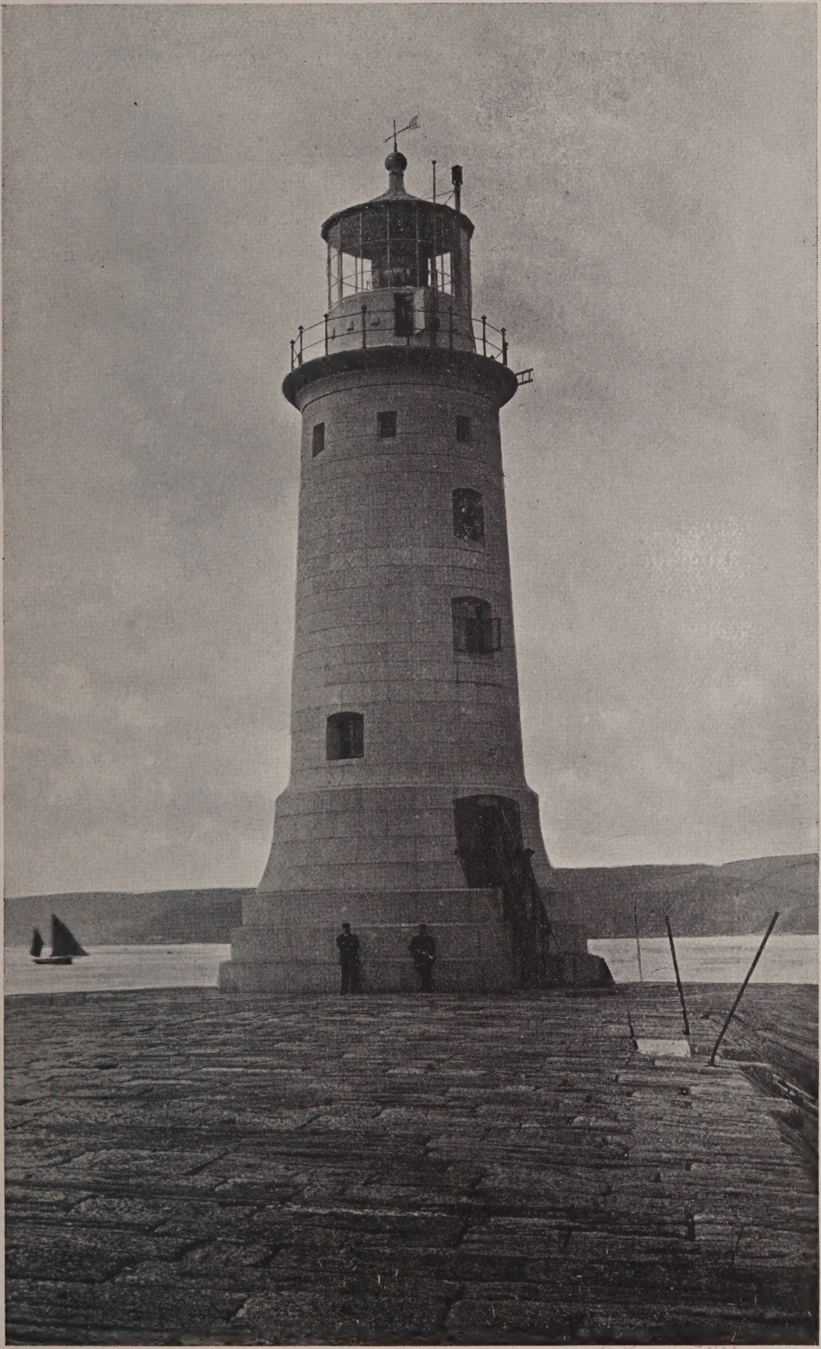
historical associations in connection with Sir Francis Drake and the defeat of the Spanish Armada, forms one of the finest promenades in the kingdom. It consists of park and gardens well laid out, and a promenade through its whole length, and at an elevation of some 110 feet above the sea. On the sea side of the promenade are grassy slopes, terminating at the water's edge. The views, both sea and land, are very extensive, that to the north including Dartmoor and the Cornish hills, while southward are to be seen the waters of the harbour and the Channel beyond, the whole forming a glorious panorama. There are several notable monuments, including a bronze statue of Drake, by Boehm, a replica of that at Tavistock, his birth-place. The Armada Memorial, erected upon the tercentenary of the defeat of the Armada, unveiled by the Duke of Edinburgh. The Smeaton Tower, already mentioned, is another object of interest to the visitor, an attendant giving all information respecting the building. The meteorological recording instruments are fixed in the grounds of the gardener's lodge at the eastern end of the promenade, where is also the computing room; the instruments are open for inspection upon application to the clerk in charge.

The Hoe.

The Citadel, now manned by a battery of artillery, occupies the eastern portion of the Hoe; it was built in 1616, and has played an important part in the history of the town. The entrance gate is well worth inspection.

The Citadel.

The Corporation have constructed a marine drive along the whole length of the Hoe, as near the water's edge as possible; this drive is sheltered from the N.N.W. and N.E., and upon sunny days throughout the year one may rest in the snug corners and enjoy the magnificent view of the harbour and sea beyond, not a sea without ships, as there are always to be seen vessels of all descriptions, either anchored or under weigh, from the grim-looking battleship or the stately ocean liner to the fishing vessel or graceful white-sailed yacht.



Photograph by] THE BREAKWATER LIGHTHOUSE. [*Heath, Plymouth.*

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Beaumont Park.

Beaumont Park. This estate, which was purchased by the Corporation some few years since, was the family seat of one of the old Devon families, and is situated in the eastern part of the Borough; it is well timbered and laid out. Military band concerts are given in the Park during the summer, the performances being duly advertised.

Freedom Park.

Freedom Park is another open space, purchased by the Corporation and well laid out; it is upon the highest ground in the Borough, situated about a quarter-of-a-mile to the north-east of Beaumont Park. Magnificent views of the harbour and neighbourhood can be obtained from here. Military band performances are given here at stated intervals during the summer.

Mount Lipson.

Mount Lipson Pleasure Ground is situated about a quarter-of-a-mile to the east of Freedom Park, and although of small extent, its natural beauty is great. Situated on the steep slope of a well-timbered hill, on the site of a very ancient fort, the grounds are well sheltered and quiet, and maintain their original natural condition.

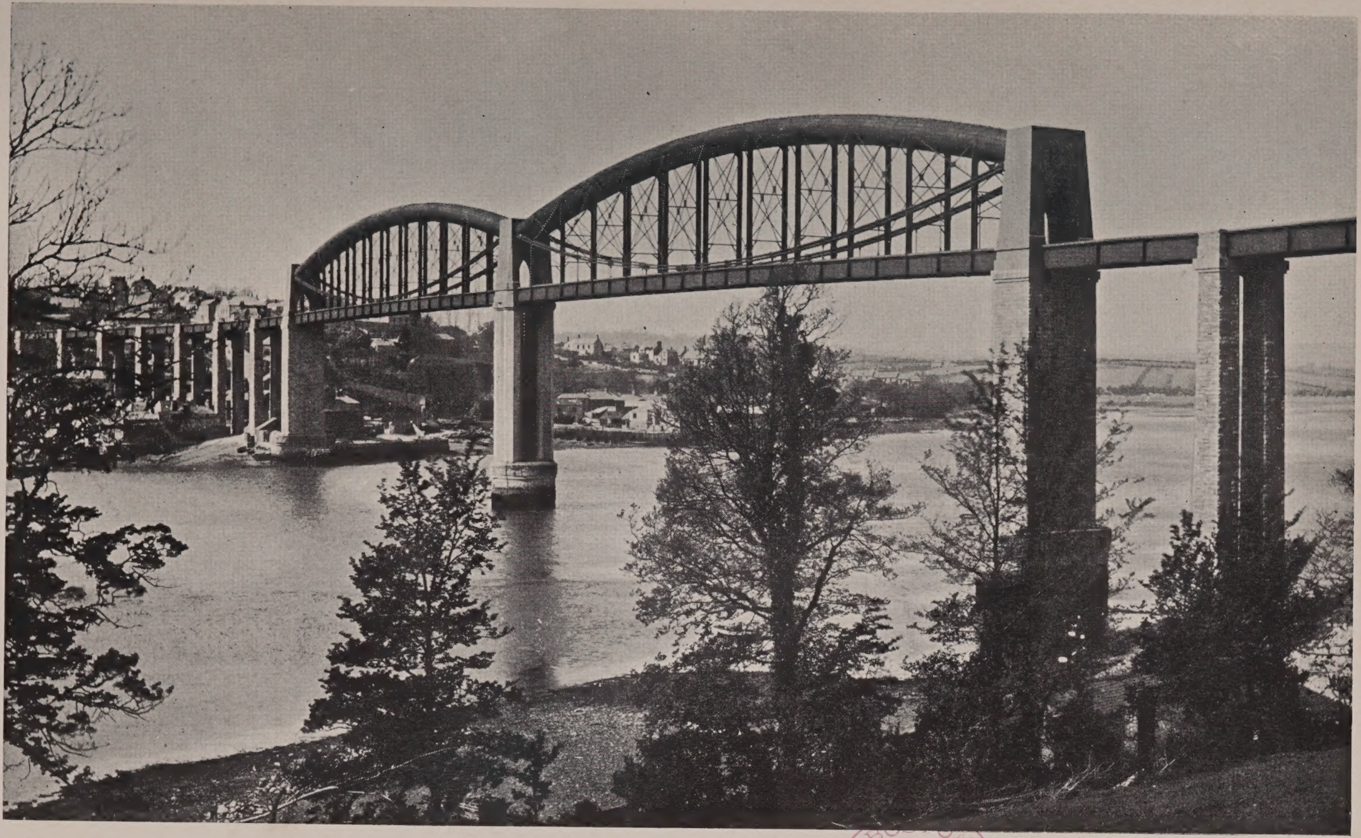
Hartley.

Hartley Pleasure Ground, situated upon the high land at the extreme northern part of the Borough. Charming views of the moorland are to be had from Hartley, the grounds are well laid out, and offer advantages for those who prefer quiet and sylvan scenery rather than the more frequented parks in the town. The terminus of the Corporation Tramway system is within a few hundred yards of Hartley.

Promenade Pier.

The Promenade Pier, projected from the coast drive passing in front of the Hoe, is about 460 feet long, upon which is built a spacious pavilion for concerts, entertainments and roller skating. During summer, concerts are given twice daily, Sundays included, in the Pavilion. The excursion steamers of the Saltash Company all call to embark or disembark passengers here.

Mount Edgcumbe Park. This estate forms the western



Photograph by] THE ROYAL ALBERT BRIDGE. [*Heath, Plymouth.*

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side of the harbour, the Park being one of the most beautiful in the kingdom. It is magnificently timbered, the trees overhanging the quiet, pebbly beaches, or the cliffs of the higher part of the Park. The growth of luxuriant foliage, practically at the water's edge, barely out of reach of the salt spray, is peculiar to the Devon and Cornish coasts.

Mount Edgcumbe.

The bathing beaches under Mount Edgcumbe are, perhaps, unique, being quite overhung by the branches of fine trees.

The cliff walks and drives in the Park are unequalled in beauty. The mildness and equability of the climate are plainly demonstrated by the growth of tropical and sub-tropical shrubs and trees in wild profusion upon the south steep slopes of cliff. Here may be seen quite a plantation of the Cork Oak, clumps of Bamboo, trees of *Eucalyptus globulus*, Cabbage Palms and many other shrubs whose home is on the borders of the tropics. During early summer the Camelias and Rhododendrons in bloom give a wondrous wealth of colour to the walks and drives. The views from the higher ground of the Park are very extensive and beautiful. From the drives on the south side, charming effects are obtained by peeps through the sub-tropical foliage at the waves breaking hundreds of feet below, or a blue patch of water seen through some break in the trees. I can imagine no more beautiful scenery of its kind than that which is to be seen in the Park of Mount Edgcumbe.

The estuary of the Tamar forms the inner or government harbour, capacious enough, when the new work now in hand is completed, to shelter a navy. The river is navigable for vessels of 100 tons as far as Morwellham, some twenty-six miles, as the river winds, from the Sound. The scenery of the higher reaches is very beautiful—the hills on either side being well wooded; the north bank is, perhaps, the most beautiful until Calstock is reached. In going by steamer from Plymouth, after entering the inner harbour, the fine government building on the right is the Victualling Yard

The Tamar.

for the Navy; next is the Signalling and Time Station at Mount Wise; the oblong building at the rear, and to the left of the signal staff, is a pigeon loft, the government having at length recognised the value, as message carriers, of the homing pigeon.

For the next four miles, practically the whole of the water frontage is occupied by the government dockyards and engineering factories, to view which the public are admitted under regulations.

This portion of the harbour is full of interest to the visitor, as here may be seen at anchor every type of the vessels forming the British Navy—of which every Englishman is so justly proud—from the old three-decker of the *Impregnable* class to the modern fast battleship with her quick-firing guns and fighting tops; here a squadron of torpedo boat destroyers; there a small fleet of torpedo boats.

After passing the government establishments, Brunel's celebrated tubular bridge comes into view, carrying the railway across the Tamar, and joining the fair counties of Devon and Cornwall. After passing the bridge, the scenery is very picturesque—the estuary of the rivers Tamar and Tavy broadening to a lake-like expanse of water; beyond this the Tamar rapidly narrows, and, in places, the overhanging branches brush the paddle-boxes of the steamer. High wooded cliffs, or rolling meadow, abut on the river banks. Pentillie Castle and grounds are beautifully situated on the north bank. Above these is another estate, belonging to the Earl of Mount Edgcumbe, known as Cothele; Cothele House being one of the best preserved old manor houses in the country. Permission may be obtained to visit it. Above Cothele is the mining village of Calstock on the steep hill side; beyond this the river passes through some grand scenery—somewhat marred by the abandoned copper mines, or those still working.

Upon the Devon side of the river are high wooded cliffs, known as the Morwell Rocks, four to five hundred feet high; the face of the rocks being covered with vegetation. The navigable portion of the river terminates just above these rocks at the Weir

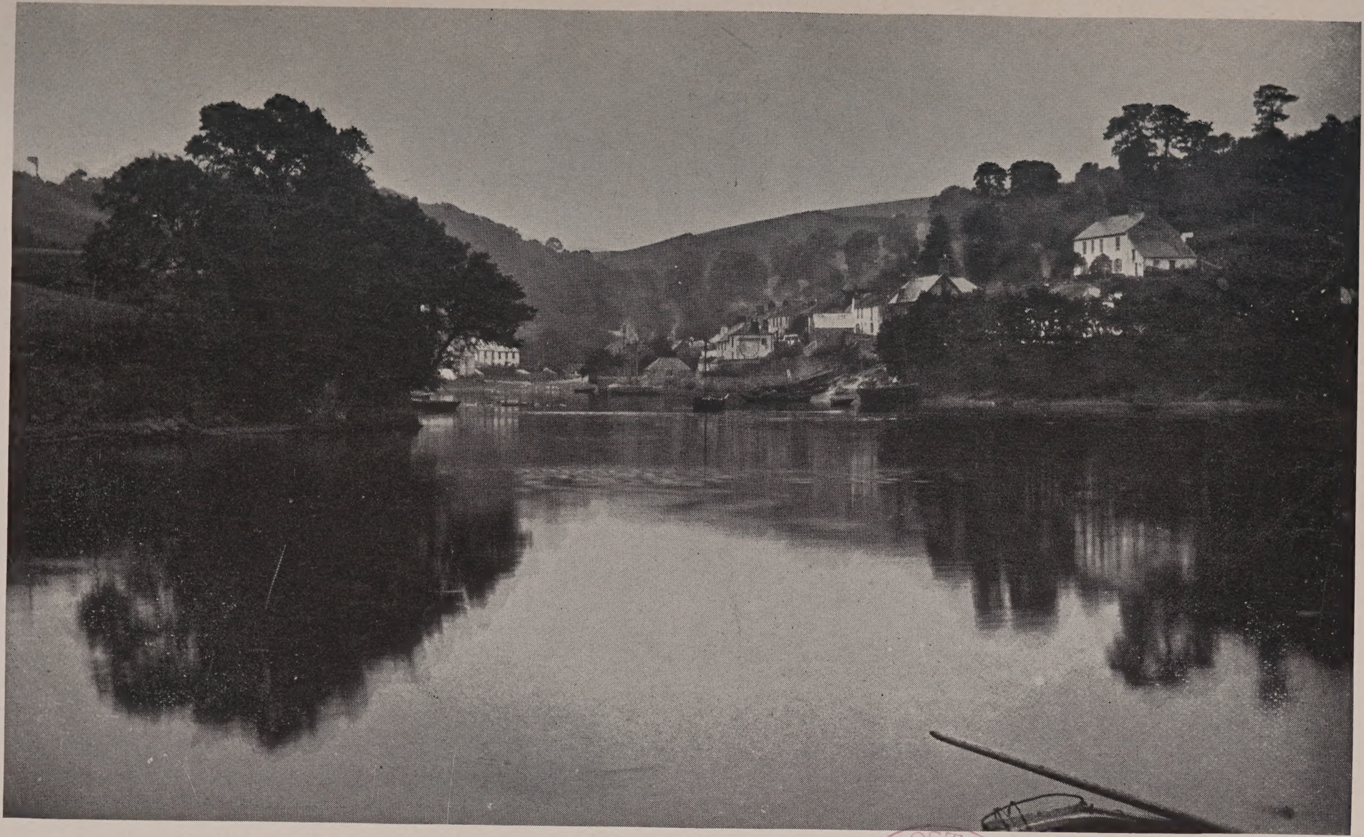
Head, where a valuable salmon fishery is carried on, owned by the Devon Consols Mining Company.

Tavy and Lynher.

The estuaries of the Tavy and St. Germans rivers are also well worth exploring; both are beautiful. The best way of seeing them is by sailing or rowing boat; any of the local men have a good knowledge of both estuaries.

The Yealm.

The river Yealm is another of the typical Devonshire rivers; its entrance is five miles to the east of the harbour. During summer, daily trips by excursion steamers are made to this delightful spot. Excellent and safe bathing can be had anywhere near the mouth of the river. There is also good fishing. At the head of the creek are two villages, Newton and Noss, principally inhabited by fishermen, who carry on a remunerative crab and lobster fishing. The estuary can also be reached by rail by G.W.R. from Millbay to Steer Point, from whence a steam launch plies to the villages.



Photograph by] VIEW ON THE RIVER YEALM. [Heath, Plymouth.

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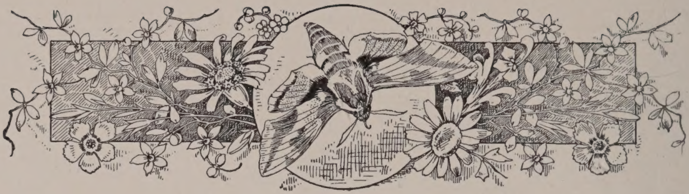


PLYMOUTH AS A TOURIST CENTRE.

WITHOUT fear of contradiction, Plymouth may be said to be unrivalled as a tourist centre for the two counties of Devon and Cornwall, the town being served by two systems of railways, the G.W.R. and L. & S.W. The former serves all South-West Cornwall, as far as Penzance and the South Devon coast, while the latter serves North Cornwall and North Devon.

Excursion Tickets.

Both companies provide an excellent service, and issue cheap tickets to all points of interest. Week-end tickets are also issued. The most distant point of South-West Cornwall (Penzance) can be reached from Plymouth in about three hours, other intermediate points in proportionate time, so it is quite possible for those whose time is limited to visit and see all that is of interest in Penzance and return to Plymouth the same day. I have mentioned Penzance as being the terminal point of the G.W.R. system. The same remarks apply to the Lizard district—Kynance, Mullion, Helford, Falmouth, Mevagissey, Par, Fowey and Looe, on the south coast of Cornwall—St. Ives, Newquay, Perranporth, Hayle, on the north coast.

Any of the coast towns of South Devon may be comfortably visited from Plymouth in the day—Ilfracombe, Bude, Appledore, Lynton and Lynmouth, on the north coast, are within easy reach—also facilities in the way of cheap tickets and good train service are afforded by the L. & S.W. Railway Co.

For those visitors who have more leisure, and are fond of sea trips, especial facilities are afforded for seeing practically the whole of the south coast of Devon and Cornwall,—without exception, the most beautiful coast scenery in the kingdom.

Coast Scenery.

The harbours on the south coast are formed by the estuaries of the Dart, Avon, Yealm, Tamar, Fal and Helford rivers, and are very beautiful. The coast possesses varied geological characteristics, from the red sandstone cliffs in the neighbourhood of Teignmouth, the limestone cliffs of Bigbury Bay, to the rugged granite cliffs of the neighbourhood of Penzance. At intervals the coast line is indented by fine bays, having magnificent beaches of sand, pebbles or shingle.

Steamer Excursions.

A fleet of ten steamers, during the summer, makes daily excursions to all parts of the coast, and short trips are made to points of interest in the harbour, and up the rivers Tamar, Yealm and Tavy.

Four-Horse Brakes.

Well appointed four-horse brakes make frequent excursions during the summer to places of interest in the neighbourhood, and whichever direction the visitor selects, his excursion will take him through lovely scenery, deep-wooded valleys, or breezy moorland, with occasional glimpses of the sea or the lake-like estuaries of the rivers.

Princetown.

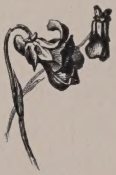
The moorland railway to Princetown, some dozen miles from Plymouth, passes through perhaps some of the grandest scenery of Dartmoor, and considerable engineering skill was exhibited in constructing this short line; the gradients are heavy, but tunnelling and high embankments have been avoided. The line ascends by a series of S-shaped curves. Princetown is the seat of the convict establishment known as Dartmoor Prison; the village is principally inhabited by people employed at the convict establishment, and is one of the highest villages in the country, it being 1,600 feet above sea level. Good accommodation is provided for the visitor in the village by hotels and refreshment houses.

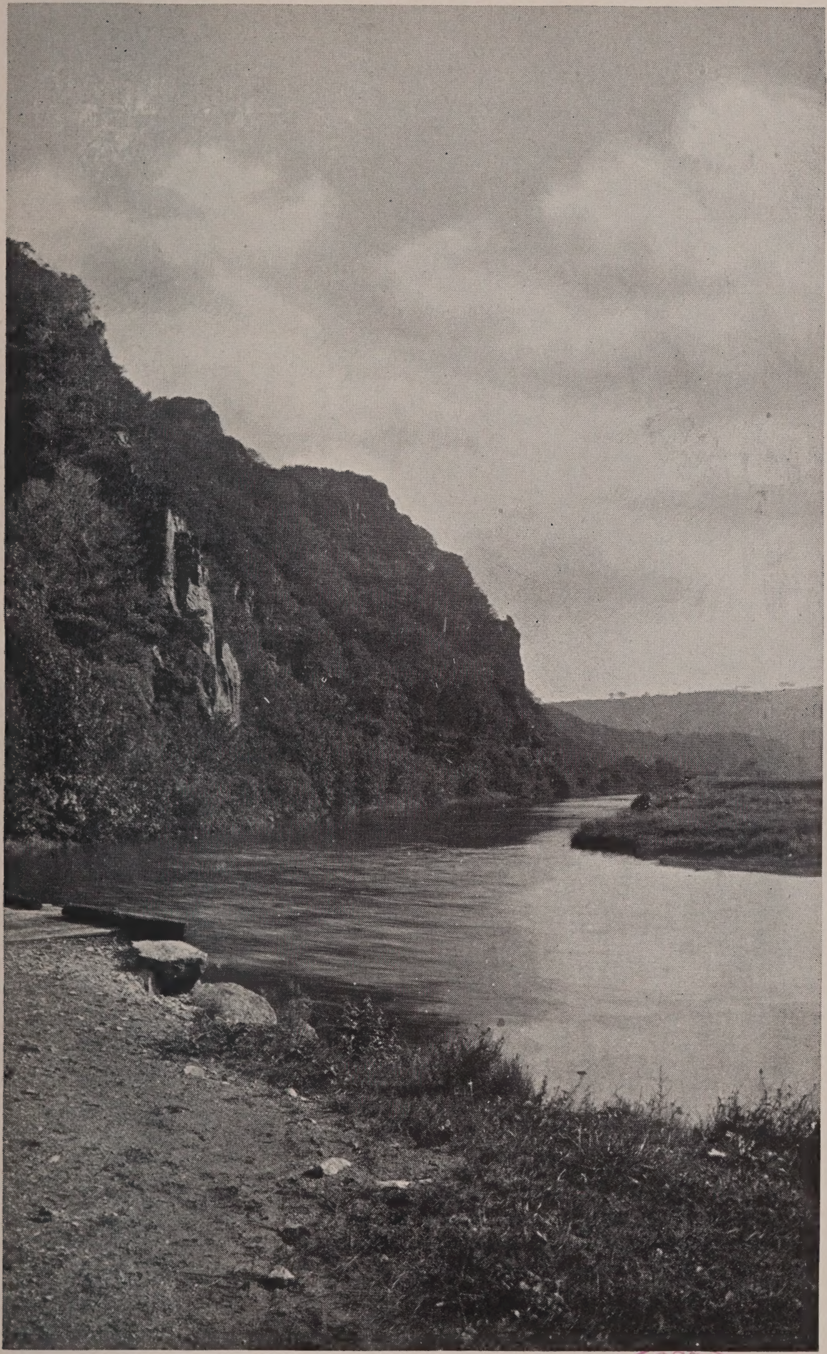
Cycling.

The moorland roads are excellent for cycling as regards the surface, but the gradients are heavy on the edges of the moor. The main roads in the neighbourhood of Plymouth are fairly good, several of the local authorities owning steam rollers, so that the surface of their roads is always in fair condition. In districts that adopt the old and more expensive method of stoning the roads, trusting to traffic and time to wear in the stones, the roads for six months of the year are loose.

Boating.

To those who are fond of boat sailing, the harbour and tidal estuaries offer splendid facilities ; however hard the summer gale may be, smooth water can be found. The estuaries of the Tamar, Tavy and St. Germans rivers are very beautiful. Well-found sailing boats, with capable men, are to be hired very reasonably.





Photograph by] THE MORWELL ROCKS, RIVER TAMAR. [*Heath Plymouth.*

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THE CLIMATE OF PLYMOUTH.

ONE of the chief considerations in the mind of those seeking a resort for spending holidays, or recuperating their health, is the place where the climate is such as will admit of their passing most of the time in the open air. It is therefore we now find Municipal Authorities, which preside over those towns which are favoured with a climate in accordance with these conditions, very wisely establish Meteorological Stations equipped with the most perfect instruments devised for accurately recording the varying elements which constitute the climate, and in this respect the Corporation of Plymouth is well to the front.

Meteorological Station.

The visitor will notice on promenading the Hoe, near the Gardener's Lodge, at the eastern extremity of this magnificent and unsurpassed sea promenade, a small, picturesque building, constructed with rusticated timber, and quaint, diamond-paned windows. On closer investigation, a curious-looking glass ball is noticed, capping the top of what appears to be a chimney. This hut is the computing room of the Meteorological Observatory, and the glass ball a Campbell-Stokes Sunshine Recorder, an instrument which records, upon a card placed in the bowl, the hours and minutes that the sun shines at this particular spot on the earth's surface, from the time his radiant body is seen above the eastern horizon until he sets in his transcendent glory in the west.

Record of Sunshine.

From a Report issued by the Meteorological Office, London, for a period of fifteen years, ending in December, 1895, it is found that the average amount of bright sunshine recorded at Plymouth each year reaches the enormous total of 1,617 hours, and places the town in the fifth position in the British Isles, and exceeds the average amount recorded in London by 377 hours.

It is scarcely necessary to emphasize the importance in which this enviable position places the town as a health and pleasure resort.

During the past two years—1896-97—the hours of bright sunshine recorded amounted to 1,743 and 1,650 respectively, which brings the average annual amount for the seventeen years up to 1,670 hours.

Mr. E. KITTO, F.R. MET. SOC., in an exhaustive paper on "Cornwall as a Winter Resort," draws attention to the fact that "the south and south-west coast stations are particularly favoured with sunshine in almost all months of the year."

Temperature and Moisture.

On the grassy slope to the north of the hut previously referred to, several other curious contrivances are observed; particularly noticeable is an erection somewhat like a beehive, and another covered with a wire screen. The former contains the thermometers for registering the maximum and minimum temperature in the shade, and also the quantity of moisture in the air; the latter records the maximum temperature in the sun. From the readings of these instruments the mean temperature is determined.

We are as dependent upon heat as we are upon pure air for our health; at the same time, however, the purest air in the extremes of heat or cold is not beneficial to health,—in fact, in very high or low temperatures life cannot be sustained.

Equability of temperature is, therefore, one of the chief factors necessary to keep one in perfect health, and the place so favoured is the ideal health resort.

To properly determine the advantages of one place above another in this respect, it is necessary to compare the mean temperature at the respective places for an equal number of years, extending over as long a period as can be collected, and this necessitates the introduction of the following table, which has been prepared from statistics contained in the following works:—"The Weekly Weather Reports of the Meteorological Office for the Year 1895"; "Cornwall as a Winter Resort," by Mr. E. Kitto, F.R. MET. SOC.; and "Bright's Guide to Bournemouth."

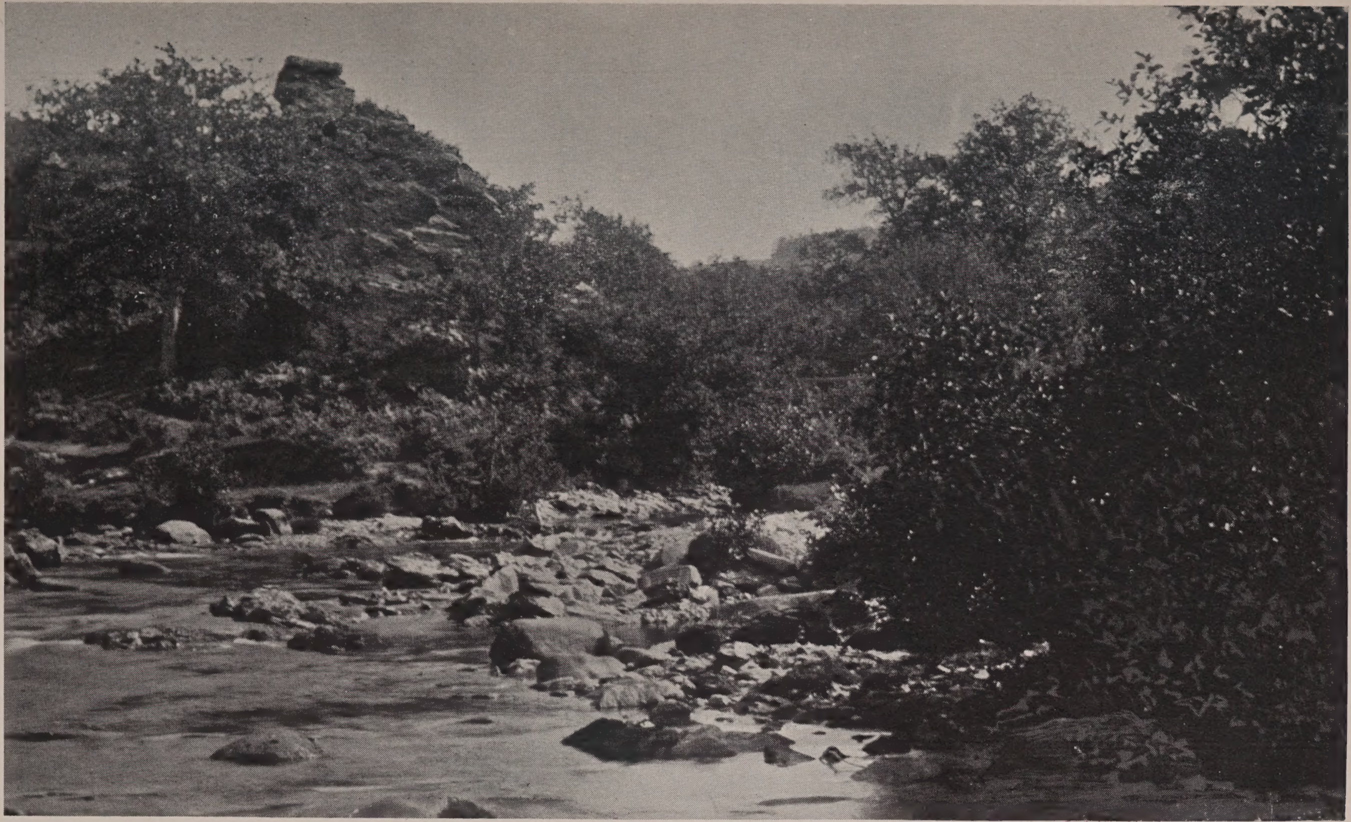
Equability and Mildness of Climate.

By carefully looking through this table, it will be observed that the mean temperature of the month of January, at Plymouth—which is the coldest month during the year at the whole of the places included therein—is about the same as at Jersey, and slightly in excess of Pau. In July and August, which are the warmest months, the temperature at Plymouth is considerably below both of these places, and equal with Torquay.

Further proof as to the equability of temperature at Plymouth is easily seen by reference to the last column in the table, where it will be seen that the range between the means of the coldest and hottest months at Plymouth is only 19·9 degrees, while at Pau the difference is 32·2 degrees, in London 24·7 degrees, and at Hastings 22·6 degrees.

The mildness of the climate of Plymouth during the winter months can be further exemplified by the Flora in its immediate neighbourhood, where Hydrangea, Genesta, Escallonia, Myrtle, Azalea and Fuchsia frequently flower throughout the winter months.

The next point to be considered is the humidity or moisture which is contained in the atmosphere. By this we mean the



Photograph by] THE VIRTUOUS LADY MINE, RIVER TAVY, NEAR PLYMOUTH. [*Heath, Plymouth.*

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MEAN ANNUAL TEMPERATURE 1870 TO 1895 INCLUSIVE.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Diff. Hottest and Coldest Months.
PLYMOUTH . .	41·5	42·6	44·1	48·6	53·5	59·0	61·4	61·3	57·7	51·1	46·6	42·6	50·8	19·9
SCARBOROUGH .	38·0	39·2	41·0	44·7	49·5	55·7	59·3	58·8	55·1	48·4	43·2	38·6	47·6	21·3
LONDON . .	38·3	40·0	42·7	48·2	53·6	59·9	63·0	62·6	58·1	49·7	44·0	39·2	49·9	24·7
HASTINGS . .	38·9	40·0	42·2	47·0	52·0	57·6	60·9	61·5	58·2	50·9	45·1	40·3	49·6	22·6
DOUGLAS . .	40·2	40·7	41·6	45·3	49·9	55·2	57·5	57·2	54·1	48·3	44·4	41·4	48·0	17·3
BLACKPOOL .	37·8	39·3	41·2	45·9	50·8	56·6	59·7	59·5	55·4	48·8	43·2	39·0	48·1	21·9
LLANDUDNO .	40·9	41·7	43·1	47·1	51·7	57·5	60·1	60·2	56·9	50·3	45·5	41·8	49·7	19·3
BOURNEMOUTH	40·2	42·2	45·3	45·4	50·4	52·8	60·4	60·5	57·2	50·8	44·3	41·7	49·3	20·3
TORQUAY . .	41·7	43·0	43·7	48·1	53·1	58·8	61·2	61·4	58·0	51·3	47·3	43·0	50·9	19·7
JERSEY . . .	41·8	42·8	44·8	49·2	53·6	58·9	62·3	63·0	69·4	53·5	48·3	43·7	51·9	27·6
PAU . . .	41·2	43·6	48·8	51·8	61·6	68·2	68·6	73·4	68·5	58·5	47·0	42·8	56·2	32·2

amount of water contained in the air in the form of vapour, the quantity of which varies with the pressure and temperature, and must not be taken to mean rainfall, the one being caused by evaporation, and the other the effect of condensation.

Humidity of the Atmosphere.

It is, therefore, pretty clear, as these two processes are going on, the humidity or amount of vapour present in the air is continually varying, and when laden with moisture to its full extent, is said to be saturated, and is generally expressed in the following manner:—Saturation being 100, the proportion which the actual amount of vapour in the air at any time bears to this amount is called the fraction of saturation, or, more commonly, the relative humidity.

The mean relative humidity at Plymouth is 84 per cent., the air being driest during the month of June, when it is 70 per cent.; there are several days during each year when the moisture in the air is less than 50 per cent., and the lowest ever recorded 41 per cent.

Rainfall.

Another important factor in the climate is the rainfall, which is generally measured in inches, and, in making comparisons, one is liable to condemn the place that receives the largest quantity as being the wettest; but this is a great mistake, as it often happens that the month of greatest rainfall does not correspond with the greatest number of wet days, neither does the month with the least rainfall prove to be the one with least number of wet days.

It is essential that those who desire outdoor enjoyment should visit the place where the least number of wet days may be anticipated. After very careful examination of the rainfall statistics contained in Symons' "British Rainfall" (which is, without doubt, the leading authority on this particular question), extending over a period of thirty years, it is found that the number of wet days per annum at Plymouth is below the average of the leading health resorts in the south-western counties, whilst the quantity—38 inches—is by no means excessive.

Ozone.

The next item to be considered is ozone, of which the late Dr. Merrifield, ll.d., f.r. met. soc. (to whom the town of Plymouth is greatly indebted for the particulars of its climate, which he collected gratuitously for a period extending over twenty-five years), in a paper on the "Climate of Plymouth," which was read before the "Plymouth Institution and Devon and Cornwall Natural History Society," spoke in the following terms:—

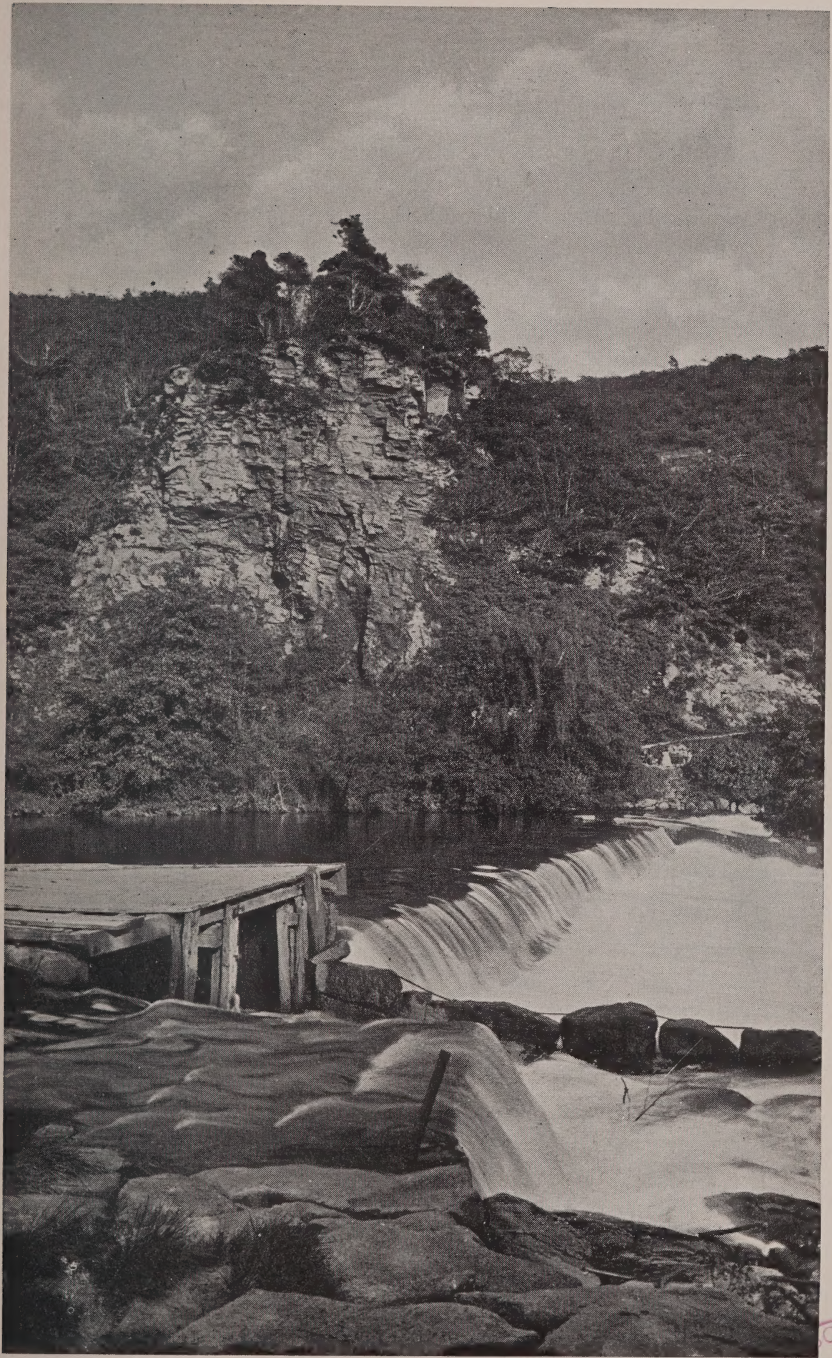
"We now come to a constituent of the atmosphere which, though small in quantity, yet plays a most important part in the economy of nature.

"No doubt everyone has noticed a peculiar sulphurous odour which follows a thunderstorm; the same smell intensified is noticed to proceed from the working of a frictional electrical machine, and is produced by the substance now under consideration.

"From its high oxydizing powers, it readily decomposes most organic compounds . . . . . and forms, from a health point of view, one of the most useful ingredients our atmosphere contains; all disease germs are at once burnt up by contact with it.

"Hence places containing much ozone are considered healthful. The quantity in air is always very small, rarely more than one in every 700,000, but it is always found in greater abundance in the open country than in crowded towns, and in still greater quantities on sea shores.

"I have just stated that friction between unlike substances and evaporation are two of the causes which produce atmospheric electricity, and we in the south-west district have practically an unlimited supply from the daily rise and fall of the tides, the occasional storms, and evaporation from the surface of the whole North Atlantic Ocean. It is also known that ozone is produced in far larger quantities where electricity is discharged continuously and silently through an atmosphere containing oxygen, than where electric discharges take place in long flashes, and therefore more ozone is produced here than where thunderstorms are more prevalent.



Photograph by] THE WEIR HEAD SALMON FISHERY, RIVER TAMAR. [*Heath, Plymouth.*

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"One other circumstance should not be forgotten when speaking of the climate of a place. It is this: Sea water holds in solution from one-thirtieth to one-fortieth of its volume of air, but there is this difference, whilst the atmosphere contains only about 21 per cent. of oxygen, the air in sea water contains 32 per cent., or more than half as much more. By agitation we may reasonably suppose a portion of the air surcharged with oxygen is given off, and during storms the quantity is very likely much increased, and the effects on health highly beneficial. This is one of the chief reasons why a seaside residence is so conducive to improved health among invalids.

"Now in Plymouth, in common with the whole south-western district, we have the broad, deep, stormy Atlantic as the storehouse whence we draw our supply of this element, whilst further east and north the storehouse is narrowed down to the comparatively shallow English Channel, North Sea or German Ocean."

With the foregoing statistics and abstracts, the climate of Plymouth has been carefully and accurately described, from which it may be summed up as being exceptionally mild in winter and cool during summer, with a large number of sunny days throughout, and endowed with a never-failing supply of that health-giving substance, ozone.

It is not surprising to find that a town situated in the centre of such magnificent scenery, and so generously endowed by nature, is so rapidly coming to the front as a holiday and health resort, as is the case with Plymouth, and which anyone visiting for the first time, fully realises by the manner in which the numerous excursions by road, rail or boat during the season are patronised. In fact it is only by a sojourn here—generally far too short—that the visitor when leaving longs for the months to pass when the time may come for another visit to enjoy the glorious sunshine and refreshing breezes wafted over the balmy sea, and laden with its life and health-giving properties.

PLACES AND OBJECTS OF INTEREST

IN THE

NEIGHBOURHOOD.

THE neighbourhood of Plymouth is the most beautiful of the beautiful county of Devon, and abounds with places and objects of interest alike to the lovers of the beautiful, the antiquary and historian.

Dartmoor.

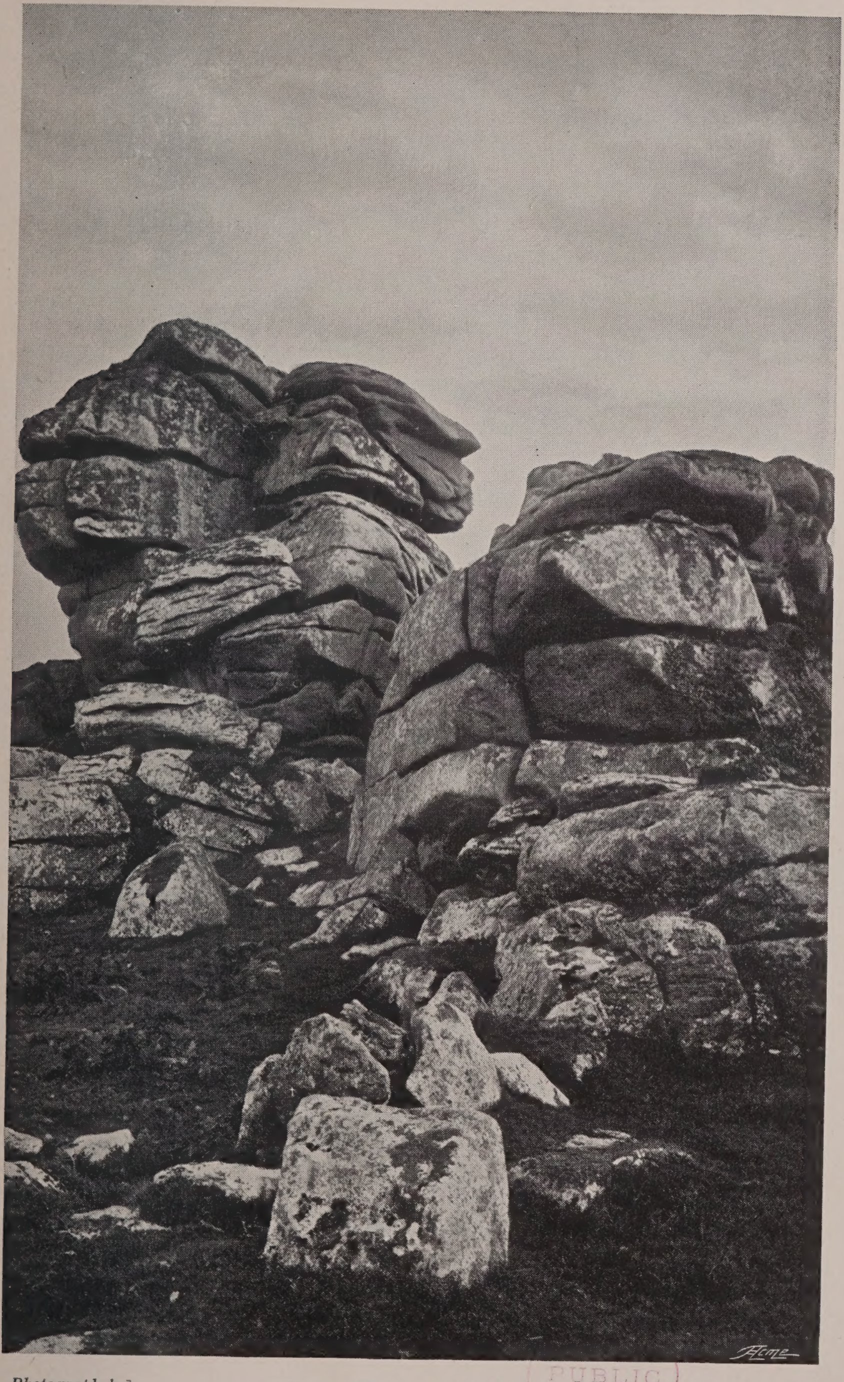
Perhaps the most interesting district to the visitor is the Forest or Chace of Dartmoor, a vast elevated tract of wild, undulating moorland, occupying the south centre of Devon, having an area of about 160 square miles, probably the largest tract of uncultivated land in England ; the average elevation being 1200 feet—the tors crowned with huge ragged masses of granite reaching a greater elevation—Yes Tor being over 2000 feet above sea level. Dartmoor forms the water-shed of the county ; nearly all the Devon rivers having their source there. The rocky gorges and deep wooded valleys through which they pass on their way to the sea go to make the most beautiful scenery in the country. Some idea may be formed of the expanse and freedom of the moorland when one learns that a portion of it is used as a field artillery range; the only inland range, as far as I am aware, in the country.

Dartmoor may truly be described as the happy hunting ground of the archæologist. There is no district in the United Kingdom so rich in the remains of pre-historic man. There are finer individual stone monuments, such as Stonehenge, but for diversity and number, Dartmoor is unique, for examples of pre-historic dwellings and graves, or monuments connected with sepulture, exist in thousands.

The surface of the greater part of Dartmoor is just the same as it was thousands of years ago; there has been but little cultivation to disturb the antiquities, and but for newtake wall building, and consequent pillaging of ancient stone monuments, the remains of the handiwork of pre-historic man would be much more numerous than they are at present. The plundering of Dartmoor and of the commons adjacent thereto, by means of illegal enclosures, has been going on for a long period, but within the last century the spoliation has been rapid. Thanks to the Dartmoor Preservation Association, and the spirited action of certain District Councils, this has been checked by successful actions at law, and the time has now arrived for the people of Devon to insist on the restitution of large tracts of common land which have been stolen in the most bare-faced manner during the past few years.

Antiquities.

It would be quite impossible to enumerate, or to attempt, an account of the antiquities of Dartmoor within the compass of this Report. For details as to their situation and description, the Ordnance Maps and the literature of Dartmoor must be consulted. It will be sufficient to say that the examples of pre-historic antiquities include cromlechs, menhîrs, stone rows, sepulchral circles, kistvaens, pounds, hut circles, track-ways and track-lines. On the borders of the Moor there are camps, or earthen castles, similar to those which are scattered all over Devon. These borderland forts usually dominate valleys leading to or from the Moor, but nothing is known about them, for there are no records of their exploration.



Photograph by] Vixen Tor, Dartmoor. [*Heath, Plymouth.*

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The antiquities of Dartmoor covered by the historic period consist mainly of ancient mining remains, mediæval stone crosses, bridges and the moorland churches.

Pre-historic Antiquities.

The greatest interest centres in the pre-historic antiquities. This is not to be wondered at, for they are the monuments and remains of a people about which we knew almost absolutely nothing about four years since.

There has been any amount of speculative theorising over the ancient stone monuments of Dartmoor. The cromlechs were Druid altars; the stone rows or avenues became processional paths, alignments marking a battle site, the remains of ancient hedges and elongated cart sheds; Grimspound became an ancient law court, a Saxon pound and a habitation for tinners; the hut circles were the homes of ancient miners, and even the logan stones and rock basons were invested with an air of mystery and romance.

Hut Circles.

Recognising that the time had arrived when the pre-historic remains of Dartmoor should be explored in a systematic and scientific manner, Mr. Robert Burnard, F.S.A., commenced the exploration of two groups of hut circles at Broadun and Broadun Ring, near Post Bridge. He was assisted in this work by the Rev. S. Baring Gould, and these explorers, later on, founded the Dartmoor Exploration Committee, which eventually became attached to the Devonshire Association for the Advancement of Science, Literature and Art. This Committee has issued four reports, and these are contained in the annual volumes of the Transactions of the Devonshire Association for 1894, 1895, 1896, 1897, and may be consulted in any of the public libraries of the county. These reports are copiously illustrated with drawings and photographs of objects found during the explorations, and accurate plans, prepared to scale, by Mr. R. Hansford Worth, C.E., an original member of the Committee.

The first report of the Committee deals with Grimspound, and the result of the exploration of this highly interesting place indicates that it was not a fortified village, nor merely a secure place for folding cattle, but was the *oppidum*, the place of refuge for the pastoral people who inhabited the surrounding district. Not a particle of metal was found at Grimspound, and only a little pottery, but implements of flint were discovered, together with holes containing wood charcoal dug in the floors of the hut circles, for cooking by means of hot stones. The hut circles also contained the remains of platforms of stone. These were formed of curbstones with straight edges, unworked, but selected for the purpose, laid in the soil, cutting off a portion of the circle. They are supposed to have been used as seats by day, and, covered by heather, formed beds by night.

Grimspound.

The wall forming the enclosure of Grimspound is very massive, and seems to have been double, with a narrow space between. This is a very puzzling feature of the "Pound," and opinions amongst experts differ, not only with regard to the wall itself, but also as to the necessity for such a Cyclopean but low structure, when the interior of the enclosure is easily dominated by high ground on all sides but one.

Another interesting "Pound" explored by the Committee is known as Smallacombe Rocks, which lie at the western limit of Hay Tor Down, a cluster of boulders forming a tor rising slightly above the summit of the down, and abruptly descending to the valley of the Becka Brook. (See six-inch Ordnance Map, 100 S.E.). This descent is strewn with boulders, some of immense size, producing as fine a "clatter" of rocks as any on Dartmoor. Amongst these is a great logan stone, weighing by computation thirty-eight tons—probably the largest boulder in Devon—which can be appreciably rocked by one person. The area in and about the tor has been enclosed by the erection of a wall, consisting mostly of vertical stones, and there are two hut circles placed on each side of the approach to this enclosure from the down. The enclosing wall is not nearly so

Smallacombe Rocks.

Logan Stone.

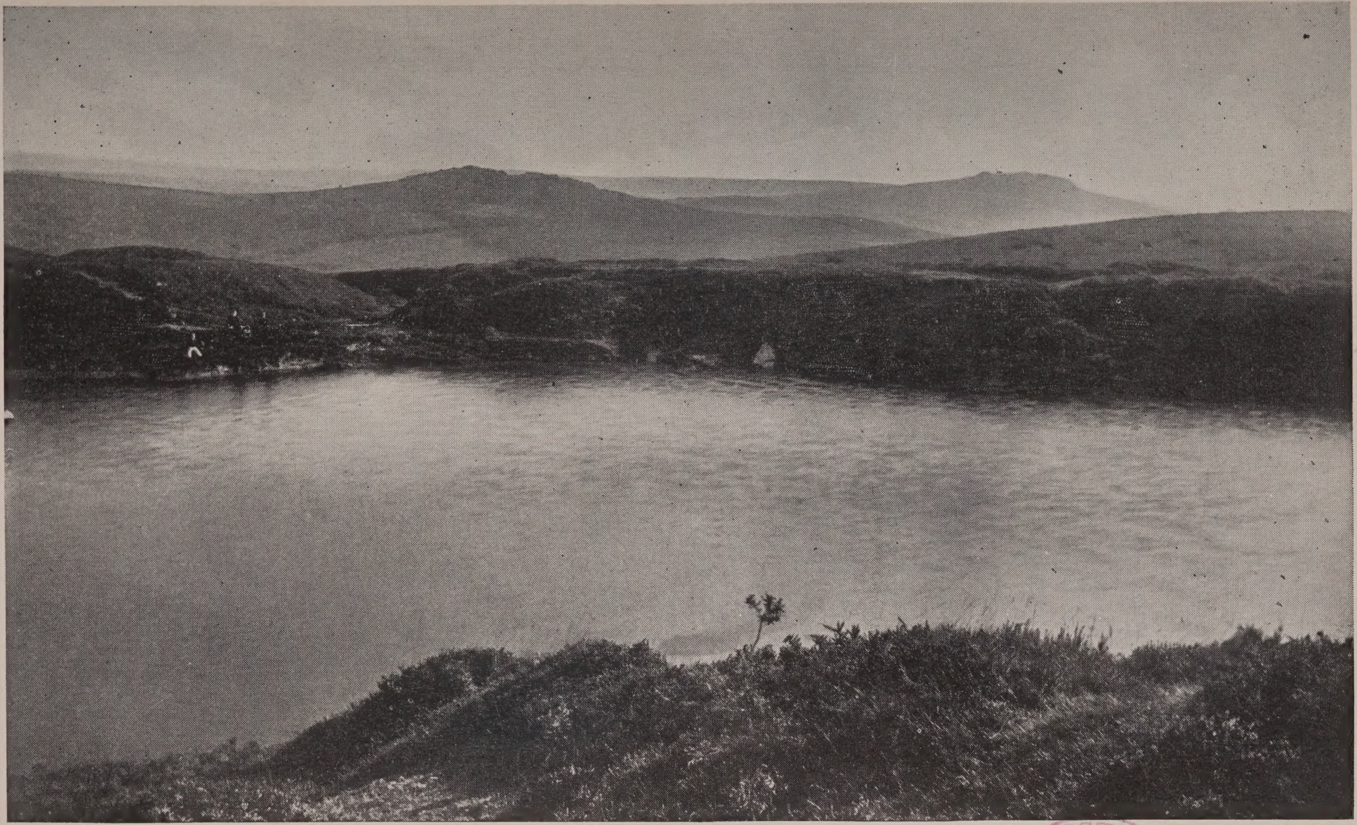
Flints and Cooking Utensils.

massive as Grimspound, but the position from a strategic point of view is far superior. The exploration of this place, and of the hut circles in and around it, disclosed implements of flint and remains of cooking vessels, of hand-made pottery, ornamented by means of twisted cord. The Committee were fortunate enough to find two whole cooking pots, of rude hand-made pottery, one in a hut circle at Raddick Hill, near Princetown, and another at Legis Tor, in the valley of the Plym. Both were associated with charcoal, and the latter had within it two of the cooking stones, which, when heated and placed in the pot, were the means employed for boiling or baking, the vessels themselves being too crude and weak to be subjected to the direct action of fire.

More than one hundred hut circles have now been explored, and the result has been to clearly establish them as the dwellings of a pastoral people existing in the state of culture known as Late Neolithic and Early Bronze—that is to say, a people still using implements of stone, but beginning to employ objects of metal.

Bronze.

It is very difficult to say how many years since these people were denizens of Dartmoor, but an indication may be given by mentioning that Sir John Evans considers that bronze was first used in Britain over 3,000 years ago, and it is probable that many of the stone remains on Dartmoor represent even a higher antiquity, perhaps a considerably higher antiquity, than the above estimate. The explorations hitherto made of the graves of this ancient people confirm the results obtained in their dwellings; there is the same kind of hand-made pottery, with corresponding patterns, and precisely similar flint implements, with the addition of a little bronze. We have thus the homes and the burial places of the original inhabitants of Dartmoor laid bare, and the writer has no doubt but that further explorations will disclose the purport of the mysterious "Sacred" Circles; indeed, the next report of the Committee deals with discoveries made at Fernworthy, which



Photograph by] CLASSENWELL POOL, DARTMOOR.— [*Heath, Plymouth.*

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throw a flood of light on this hitherto very obscure subject. The stone rows and menhîrs connected with them are apparently sepulchral, and positive evidence is being gradually accumulated in support of this.

Ancient Inhabitants.

That the ancient inhabitants of Dartmoor were a pastoral people is clear from the enclosures for herding cattle associated with their dwellings, and that they were peaceful is illustrated from the fact that only one arrowhead has been found in a hut circle. A few specimens have been found on the open Moor, but these have probably been shot away in hunting. Dartmoor at this early period was attractive as pasture land, especially in the summer; for although there were thickets with scrubby oak in many of the valleys, the bold sweeping open downs ran up to the tors and afforded, as they do to-day, pasturage for thousands of cattle and sheep. The lowlands were not so desirable, for they were covered with great stretches of forest, furze brakes and morasses, the lairs of bears, wolves and the smaller predatory animals.

Dartmoor, to be appreciated, must be explored on foot. This is best done from Princetown, Post Bridge, or the small towns on the borders of the Moor. The antiquities are scattered over a large area, but the Ordnance Map, guide books and local direction will enable the visitor to see a great deal in a long day.

The Old Tinners.

The antiquities of Dartmoor covered by the historic period are not so important as the pre-historic stone monuments, but they are interesting and numerous. The Moor in all directions is covered with the works of the old tinners—heaps of débris, remains of streaming operations, costeaning pits, and shallow shafts, sunk in huge trenches. Here and there the diligent observer will find remains of "blowing" or smelting houses, where the black tin oxide was reduced in rude furnaces with wood charcoal to the metallic condition. The moulds for running the tin into ingots, scooped out of granite blocks, may still be seen, together with primitive stone mortars in which the slags were pounded so as to extract the prills of tin.

Good examples of blowing houses may be seen at Huccaby, close to the junction of the Obrook with the Dart; at Gobbett, near Hexworthy; at Deep Swincombe, near Swincombe; and in the Plym and Erme Valleys. The Furnum Regis, or King's Oven, is one of the boundaries of the Forest of Dartmoor, and is mentioned in the first Perambulation of 1240; but whether it was in use at that time as a smelting place is not disclosed. It was probably used for this purpose at a more remote period. The blowing house at Deep Swincombe has yielded some pottery of early mediæval type. This is the earliest known example, but more ancient mining evidence may be buried under the great heaps of débris thrown up by later miners, and which lie scattered all over the valleys and slopes of the Moor.

Stone Crosses.

Mediæval piety is represented by stone crosses, set up apparently as guides over the wastes, or as boundary marks. Syward's, or Nun's Cross, near Princetown, served both as a guide post and as a bound stone, for it points the way from east to west across the Moor, and is mentioned in the first Perambulation, so it was standing in 1240. The western face of this cross bears the word "Boclond," or book land, that is land held by charter, or, as some think, standing for Buckland, for this side faces the lands formerly held by the monks of Buckland Abbey. The eastern face of the cross is said to have the words "Crux Siwardi" incised on it, but this is much obliterated by the weathering of the granite.

Lydford.

Lydford, the ancient capital of Dartmoor, was a place of some importance, even in Saxon times, for it attracted the cupidity of the Danes, who plundered it, after sacking and burning Tavistock Abbey. The Castle was built after the Conquest, and earned an unenviable notoriety as the Stannary Prison. The tinners, who from time to time met on Crockern Tor, near Two Bridges, had a summary way of punishing all those who interfered with their rights and privileges. They had great powers, which they did not hesitate to abuse, for Richard Strode, member of Parliament for Plympton, in 1512, was arrested, fined heavily and thrown into that "heinous, contagious and detestable place," Lydford Castle, because he used his influence in Parliament to prevent the tinners from silting up the harbours of Devon by mining operations on Dartmoor.

> "'First hang and draw,
> Then hear the cause,' is Lydford law."

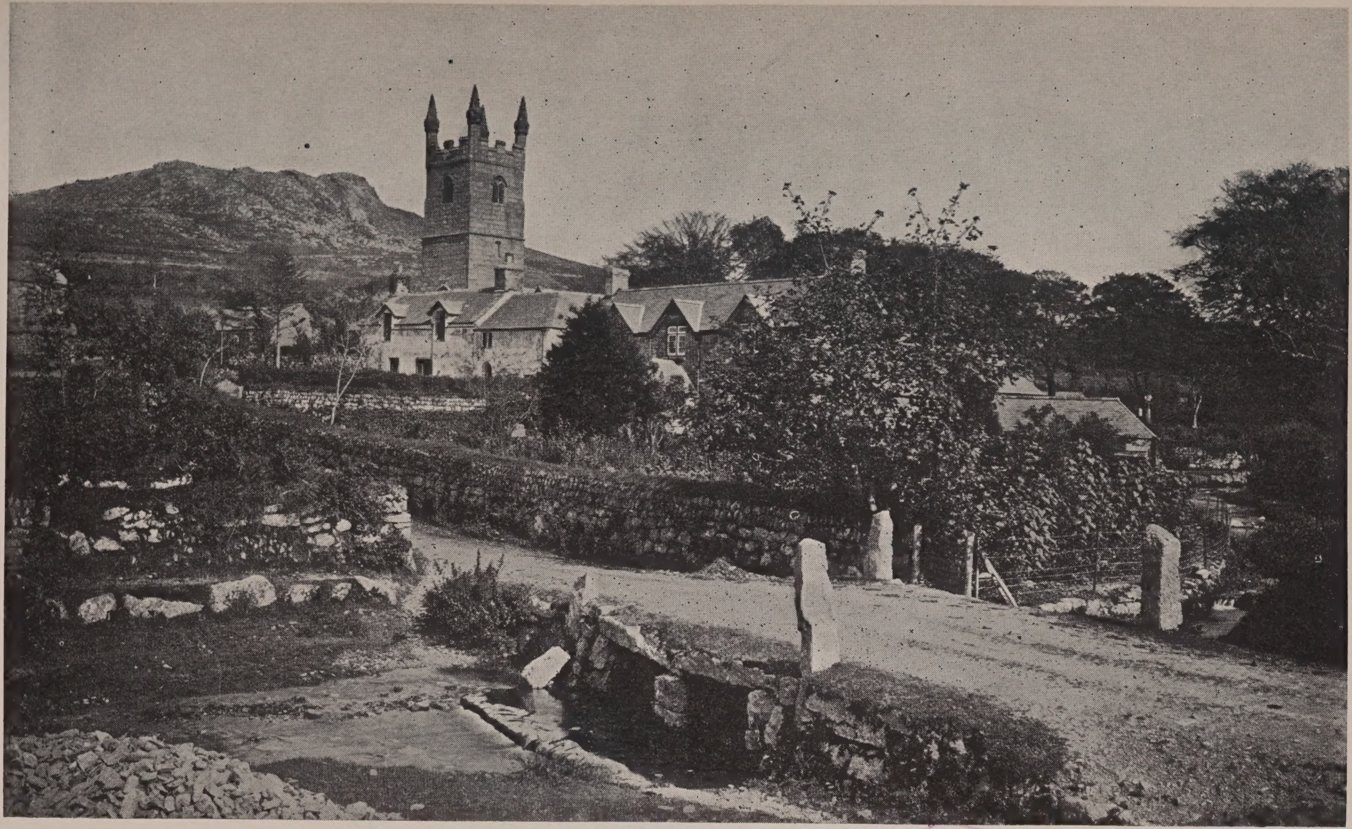
There is a small fourteenth century castle at Gidleigh, on the borders of the Moor. It is in ruins, and but little or nothing is known of its history.

Old Path Tracks.

Prior to the end of the last century there were no wheel roads across Dartmoor. Goods were carried on pack horses, and the way these followed can still be clearly traced in places. Rivers were crossed on "clapper" bridges, flat slabs of granite, laid on stone piers. Post Bridge is a notable example. Many writers invest this structure with great antiquity, but there is no warrant for such assumption. The pre-historic way across Dartmoor was by means of the Great Central Trackway, which crosses the East Dart by a ford at Still Pool, some quarter-of-a-mile north of the Clapper Bridge. Some of the arched bridges on the borders of the Moor are picturesque objects; that of Holne, over the Dart, appears to have been built, in 1413, to replace an older structure, which was washed away by a sudden rising of the river.

Churches.

The moorland churches are well worth visiting, from the Cathedral of the Moor, at Widecombe, to the distant border church of St. Michael-on-the-Hill, Brent Tor. This tiny church, perched on the summit of a volcanic hill, one thousand feet above sea level, possesses a nave thirty-seven-and-a-half feet long, fourteen feet nine inches wide, with a sturdy tower, just eight feet square and forty feet high. It was erected in the thirteenth century, and, thanks to the Duke of Bedford, stands to-day as strong as ever.



Photograph by] SHEEPSTOR AND SHEEPSTOR CHURCH. [*Heath, Plymouth.*

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VITAL STATISTICS AND METEOROLOGICAL CONDITIONS

OBTAINING IN THE BOROUGH.

Population.—99,136.

Death Rate.—19·1 per 1,000.

Birth Rate.—28·3 per 1,000.

Water Supply.—Abundant—one of the purest waters in the Kingdom. Piped from source, twelve miles distant.

Climate.—Mild and equable.

Rainfall.—Forty inches.

Mean Temperature.—Twenty-five years, 52·1 Fahr. The fifth sunniest station in England.

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